

<212> DNA

<213> Homo sapiens

<400> 2045

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nnttgacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg
60
atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga
120
cantacaggc tttggccgag gcgggttga agaaaccggt caaccggtgg tttggccccg
180
catcaatgcc cagaaccaga agccttgccg attcgtccca ggccgttcaa ggccgatggc
240
gagatcgtcg cgatgactgg cgacgggtgc aacgacgcc cctcgctcaa ggccggcccat
300
atcgggtgtcg ccatggacaa acgcggcacc gacgtcgccg gcgaggcttc cgccatggtc
360
ctgctcgagg atgattttgg atcgatcgtg cagtcgggtcc ggctcg
406

```

<210> 2046

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2046

```

Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp
1      5      10      15
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
20     25     30
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
35     40     45
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
50     55     60
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
65     70     75     80
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
85     90     95
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
100    105    110
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
115    120    125
Ile Val Gln Ser Val Arg Leu
130    135

```

<210> 2047

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2047

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aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga
60
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
120

```

tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt
 180
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca
 240
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga
 300
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggt gagtttagcc tcagtgttgg
 360
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat
 420
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgggtgc
 480
 tggcttttagc ccttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac
 540
 agctggctcg gtggactgga ctgaccagct ggggtctcagg aacttggaaag tgtccagctg
 600
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc
 660
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggctctga
 720
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag
 780
 caaagatttg gctgag
 796

<210> 2048

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp	
			20				25					30			
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35				40						45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
	50				55					60					
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65				70					75					80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
			85				90							95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
		100					105						110		
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
	115				120						125				
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu	
	130				135					140					
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150				155						160

<210> 2049

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2049

cgcgctcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag ctgcgctcg
 60
 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg
 120
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca
 180
 gcctacgggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgcccattgt
 240
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc
 300
 gtcggccgat ggcgcacgct gaccactac ctgctgccgg cgctctctgc tccctgctg
 360
 cgccacgcca tgttgctct gccgggcatt gcgctggcgc tggcggcctt ggggtttttt
 420
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct
 480
 tatctgaac gggcgccctg gggagtctg gcaccg
 516

<210> 2050

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5					10					15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20					25					30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
		35					40					45			
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55					60				
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70					75				80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
				85					90					95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
			100					105					110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115					120					125			
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130					135					140				
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150					155				160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
				165						170					

<210> 2051

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2051

```

gagcaaaact atcggttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat
60
aatagtgatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt
120
atztatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat
180
tggttagatg atggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa
240
tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg
300
atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttttaattaat
360
aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t
411

```

<210> 2052

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2052

```

Glu Gln Asn Tyr Arg Ser Thr Gly Asn Ile Leu Lys Ser Ala Asn Gln
 1             5             10            15
Leu Ile Ser Asn Asn Ser Asp Arg Leu Gly Lys Asn Leu Trp Thr Asp
      20             25            30
Gly Glu Met Gly Glu Pro Val Gly Ile Tyr Ala Ala Phe Asn Glu Leu
      35             40            45
Asp Glu Ala Lys Phe Val Ala Ser Gln Ile Gln Asn Trp Val Asp Asp
      50             55            60
Gly Gly Glu Leu Asp Asp Cys Ala Val Leu Tyr Arg Ser Asn Ser Gln
      65             70            75            80
Ser Arg Val Ile Glu Glu Ala Leu Ile Arg Cys Gln Ile Pro Tyr Arg
      85             90            95
Ile Tyr Gly Gly Met Arg Phe Phe Glu Arg Gln Glu Ile Lys Asp Ala
      100            105            110
Leu Ala Tyr Leu Arg Leu Ile Asn Asn Arg Gln Asp Asp Ala Ala Phe
      115            120            125
Glu Arg Val Ile Asn Thr Pro Thr Arg
      130            135

```

<210> 2053

<211> 287

<212> DNA

<213> Homo sapiens

<400> 2053

```

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc
60
ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac
120

```


ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
 180
 acacctgagg gtgccgaggg cccgactccg caaaccacgc accagctgaa ggcctgtgc
 240
 tccctggctg cagaggggtat gtggacagac acatttgagt tttgtga
 287

<210> 2054
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 2054
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys
 1 5 10 15
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr
 20 25 30
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly
 35 40 45
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys
 50 55 60
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys
 65 70 75

<210> 2055
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 2055
 nnacgcgttg ttatgaacaa tgacgggtgtc ctctaccccg atacctgcgt ggggtactgat
 60
 tcccacacca ccatggaaaa tggctctggc attctgggct ggggcgtcgg tggatttgaa
 120
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tgttggttt
 180
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact
 240
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg
 298

<210> 2056
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2056
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys
 1 5 10 15
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu
 20 25 30
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln
 35 40 45
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50		55		60
Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr				
65	70	75	80	
Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr				
	85	90	95	
Gly Gly Ser				

<210> 2057

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2057

```

acgcgtccccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
60
gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
120
caaaatctag ttggacccaa caacgcccag tatggctcgtt atctagcctt tggatgatc
180
ttcatggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt
240
ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaa
300
agagaaacct tctcaagtta ccctgatgat gttactgtta ctacttgac caaaaaagg
360
gacaaaaaac ttgattttac agtttggaa agcttaacag aagatttact tgctaacgga
420
gactactcag cggaatattc taactacaag agtggccatg ttacgacaga cccaaatggt
480
atcctactaa aaggtacagt caaagataat ggcctccagt tcgcatccta tctaggaatt
540
aaaacggacg gaaaagttac tgttcatga
569

```

<210> 2058

<211> 128

<212> PRT

<213> Homo sapiens

<400> 2058

Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr				
1	5	10	15	
His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr				
	20	25	30	
Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp				
	35	40	45	
Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp				
	50	55	60	
Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp				
65	70	75	80	
Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp				
	85	90	95	
Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln				

	100		105		110										
Phe	Ala	Ser	Tyr	Leu	Gly	Ile	Lys	Thr	Asp	Gly	Lys	Val	Thr	Val	His
	115				120							125			

<210> 2059
 <211> 644
 <212> DNA
 <213> Homo sapiens

<400> 2059
 gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc
 60
 agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcgatgc
 120
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc
 180
 gatcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcca
 240
 gctcgacaag aagaaccgca gaggggagac ggccctgggtca gggagcgac cttcagcgtt
 300
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag
 360
 tcggccgagg tccgcccgtta cctctctcat ggcttccaca ggaacgcggt cacacaccac
 420
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc
 480
 gtagcgggct gctgaggtga caaagatcca cagatccgag gcttgagca actgagccgc
 540
 cagatcacga ttgcccgtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc
 600
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt
 644

<210> 2060
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2060
 Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly
 1 5 10 15
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala
 20 25 30
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu
 35 40 45
 Ser Ser Leu Ala Gln Asn Gln Lys Arg Arg Glu Val Ile Ala Ser
 50 55 60
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val
 65 70 75 80
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ser Arg Leu Tyr Glu
 85 90 95
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln
 100 105 110
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115 120 125

Glu Phe
130

<210> 2061
<211> 481
<212> DNA
<213> Homo sapiens

<400> 2061
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag
60
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag
120
acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctgggggctc
180
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggg
240
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt
300
tgccacacgc accaggtcct gactgggagt ccggccccca gggcctgtgg atggctggcc
360
tgggcccagc ctccgcccccc aagggtgctg gcacctggca tgtgcccgcac agttggggcc
420
ggctggtggg aagggtgtgtg tcagggtggcg gagcctcggg gccaggatct cactcacgcy
480
t
481

<210> 2062
<211> 133
<212> PRT
<213> Homo sapiens

<400> 2062
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser
1 5 10 15
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
20 25 30
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
35 40 45
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg
50 55 60
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
65 70 75 80
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe
85 90 95
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
100 105 110
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
115 120 125
Leu Leu Thr Arg Leu
130

<210> 2063
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2063
 gccggcgccg tcgagcgcgt gcctttcaat atcgaggccc aagacatggt gctgctcatc
 60
 gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc
 120
 atcgacgccg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac
 180
 tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgcgcgt gcaccacgtg
 240
 gtggaagaaa ccaaccggac cctagatgcc gctaccgcgc tggcatcttc cgatctagat
 300
 acattccggc ggcttatgcg cgagagccac atctccctgc gcgaccttta tgaggtcacc
 360
 actccggagc tcgactccgt ttttaccgcg gccggcgagc tgggcgctcg catgannnn
 419

<210> 2064
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2064
 Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
 1 5 10 15
 Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
 20 25 30
 Gln Tyr Ala Ser Arg Arg Gly Ile Asp Ala Val Gln Ser Ala Ala
 35 40 45
 Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
 50 55 60
 Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val
 65 70 75 80
 Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
 85 90 95
 Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
 100 105 110
 Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
 115 120 125
 Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
 130 135

<210> 2065
 <211> 598
 <212> DNA
 <213> Homo sapiens

<400> 2065
 gccggcgcta tggcctctct gctcgccgac gccgccgatg cccttcccg cgcaaagggtg
 60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc
 120
 attcaggagg tcatagctga gacggccgcc gtccaacggt ggaatcccga cgccgacgtg
 180
 cttctcgaac tcggtggtga ggatgccaaag atcacctacc ttaagccggt ccccgaaacag
 240
 cgcataaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg
 300
 ctgcacaccg aactccccgg cctcaatgac ctgcacatccc gagccaagac catccatccg
 360
 atcgccctgc gctgtggtgt ttttgccaag tccgaccttc agcccctcat taacgagggga
 420
 gcccgccacg aggatctggc tgccctcggtc ctgcaggctg tcgccactca gtgcattgcc
 480
 ggccctggcat gtggtcgccc gattcgaggt aaggatcatct tccttggcgg tccgcttcac
 540
 tttatgcaa gtttgcgaga cgctttctcg cgcgtcctcg acggttaagg tgacgcgt
 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1				5					10					15	
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25					30		
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
		35				40						45			
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
	50					55					60				
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70					75					80
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
			85						90					95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100					105					110		
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
		115					120					125			
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
		130				135					140				
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145					150					155					160
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
			165						170					175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180					185					190		
Leu	Asp	Gly	Lys	Val	Asp	Ala									
			195												

<210> 2067

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2067

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ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggaggc cgtggccaac
60
aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg
120
tacttcgggt tgcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg
180
ccgatcggct acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc
240
gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcatcgg caaggacatc
300
gtcaacttcc acgccctgtt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg
360
accggt
366

```

<210> 2068

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2068

```

Phe Gln Gln Met Leu Gln Thr Trp Thr Arg Ser Gly Thr Leu Gln Glu
1           5           10           15
Ala Val Ala Asn Lys Ile Ala Glu Trp Leu Asp Ala Asp Leu Gln Gln
20           25           30
Trp Asp Ile Ser Arg Asp Ala Pro Tyr Phe Gly Phe Glu Ile Pro Gly
35           40           45
Glu Pro Gly Lys Tyr Phe Tyr Val Trp Leu Asp Ala Pro Ile Gly Tyr
50           55           60
Met Ala Ser Phe Lys Asn Leu Cys Asp Arg Thr Pro Glu Leu Asp Phe
65           70           75           80
Asp Ala Phe Trp Ala Lys Asp Ser Thr Ala Glu Leu Tyr His Phe Ile
85           90           95
Gly Lys Asp Ile Val Asn Phe His Ala Leu Phe Trp Pro Ala Met Leu
100          105          110
Glu Gly Ser Gly Tyr Arg Lys Pro Thr Gly
115          120

```

<210> 2069

<211> 280

<212> DNA

<213> Homo sapiens

<400> 2069

```

cctagagagg atggtggaga ctgtgcgtgt gcagggtggt ccggaacctt ccctgggatg
60
catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctggt
120
gcctttggct ggaattccac ccagaccttc ttgcctcaag aacgcccttc ccccttcaga
180

```

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa
 240
 agaccctctc ctcgatcaag ctttggtcaa gctcctaccc
 280

<210> 2070
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 2070
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly
 1 5 10 15
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro
 20 25 30
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys
 35 40 45
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val
 50 55 60
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu
 65 70 75 80
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro
 85 90

<210> 2071
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2071
 acgcgtgtcc agcagactta gaaagcaggt tcctcttgct atacagcacg ttaacatagc
 60
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat
 120
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac
 180
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag
 240
 gggaggttgt caggggatga gctgctcctg aggaagagggc agagatcaag cttcactcag
 300
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac
 360
 aatatgttca tacataaaga ctctaccctc aggtgatca
 399

<210> 2072
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2072
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu
 1 5 10 15
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp


```
<210> 2075
<211> 481
<212> DNA
<213> Homo sapiens
```

<400> 2075

ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa
 60
 accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt
 120
 atcctgagcg ctctgcccactgggctg ctgaggaaga tccgcctctg gcacgacagc
 180
 cgtgggcctt ccccaggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga
 240
 cagggtcggg tcttccctgc ccagtgtcgg ctgtctgccg gcaggcatga tggctgcgtg
 300
 gaggcgggagc tcacctgtct gcaaggggga ctgcgcttct ggaagctttt ctattgcaag
 360
 ttcacagagt acctggagga tttccatgtc tggtgtcggg tgtacagcag gccctcctcc
 420
 agccgctacc tgcacacgcc gcgccccacc gtgtccttct cctgtctgtg cgtctacgcg
 480
 t
 481

<210> 2076

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2076

Xaa	Ala	Arg	Leu	Thr	Ser	Lys	Val	Tyr	Ile	Val	Leu	Cys	Gly	Asp	Asn
1				5					10					15	
Gly	Leu	Ser	Glu	Thr	Lys	Glu	Leu	Ser	Cys	Pro	Glu	Lys	Ser	Leu	Phe
			20					25					30		
Glu	Arg	Asn	Ser	Arg	His	Thr	Phe	Ile	Leu	Ser	Ala	Pro	Ala	Gln	Leu
		35					40					45			
Gly	Leu	Leu	Arg	Lys	Ile	Arg	Leu	Trp	His	Asp	Ser	Arg	Gly	Pro	Ser
	50					55				60					
Pro	Gly	Trp	Phe	Ile	Ser	His	Val	Met	Val	Lys	Glu	Leu	His	Thr	Gly
65					70					75				80	
Gln	Gly	Trp	Phe	Phe	Pro	Ala	Gln	Cys	Trp	Leu	Ser	Ala	Gly	Arg	His
			85					90						95	
Asp	Gly	Arg	Val	Glu	Arg	Glu	Leu	Thr	Cys	Leu	Gln	Gly	Gly	Leu	Gly
			100					105					110		
Phe	Trp	Lys	Leu	Phe	Tyr	Cys	Lys	Phe	Thr	Glu	Tyr	Leu	Glu	Asp	Phe
		115					120					125			
His	Val	Trp	Leu	Ser	Val	Tyr	Ser	Arg	Pro	Ser	Ser	Ser	Arg	Tyr	Leu
	130					135				140					
His	Thr	Pro	Arg	Pro	Thr	Val	Ser	Phe	Ser	Leu	Leu	Cys	Val	Tyr	Ala
145					150					155					160

<210> 2077

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 2077

ncagagtgtt ttgagctatc tggatatccca aatgatgtga atactttcag aaaccaatgg
60
caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatctttttt ttttttttgt
120
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct
180
ctttggtcta cagtgagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg
240
agtccaggag ccttaggaag gctgaaaçaa gccctgacca gcaggcttag ttgtcctgag
300
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct
360
ctgggtcccc gagcacagtg ccagggaaga ccccccaat ccccatctga acaggccgag
420
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct
480
ctccctcgc aagagcaggc ttgtgcacag cccggcacag ggccagccag ggcggcccct
540
gcggtgtgc agcgcttacc agggggagga gttcagccat caggaccttt tccaagtgga
600
tctgctggtc cagcacagcc actcgcagct tgagggccgc cagggtctgc agctcctggg
660
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacagga
720
cggcgaggct ccgggggggc tnnccccaca gacatggtct tgggtggctgt tccgccaccg
780
ctgcacgag ctctgcagc ctgtgcagac actggcccac catggcctgc agccctcca
840
gcgtgagcag gcagcggtag tcttgcattc agtccatggg ggctgctgag agctcctccc
900
tcatgcgag tctcagcagc gagcaggcct tccgcaggcg ccccgctcc gcctccacct
960
ccacagcact gagcctgggc tggggccccgc ctgaagctgt ctgcatgttc tggaggaact
1020
gggttttggc agcggcggca tccgtggaat cactggtctg tgtggaactg agctgggccc
1080
acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcaggtgcc
1140
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgct
1200
ggctccctgag gcccgcacca ggctggggg ttcgggctcc catcccaaca cgggtcccat
1260
ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga
1320
ggcccttggg ggggtctctg tctgaagcat ggccaccagc ttggcctggg gaatgcggtg
1380
gggcggaggc tgtcgtgcc aagaggtga
1410

<210> 2078

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser
 1 5 10 15
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser
 20 25 30
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser
 35 40 45
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys
 50 55 60
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln
 65 70 75 80
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly
 85 90 95
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala
 100 105

<210> 2079

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag
 60
 gtactggcgg tcaaatacta caaacgcatt accttcaacg agatcactct caagcgcgtt
 120
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcttc acaggaatgc
 180
 cggcgtgtgc ttgaccgctt ggtgggggtac ctggtgaccc aagagttgcg gcgcctgatg
 240
 ggcaaacctta cttccgctgg ccgcgttcaa tcaccgcgcg tgtttcttgt ggtcttgccg
 300
 gaacgcgaga tccgcaactt tcaggtgatc aatcactttg gcgtgcgtct gttctttgcc
 360
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtaccgga ttctgcaagc
 420
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat
 480
 gtggtcgtgg agtctgcca ggatcgcaag gccgagcgtc atctctctgc accattcatc
 540
 tcatccactc ttcaacaggc cgcca
 565

<210> 2080

<211> 188

<212> PRT

<213> Homo sapiens

<400> 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp
 1 5 10 15
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe
 20 25 30
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

35						40				45						
Gln	Ile	Asp	Leu	Asn	Arg	Val	Ala	Ser	Gln	Glu	Cys	Arg	Arg	Val	Leu	
50						55				60						
Asp	Arg	Leu	Val	Gly	Tyr	Leu	Val	Thr	Gln	Glu	Leu	Arg	Arg	Leu	Met	
65	70						75						80			
Gly	Lys	Pro	Thr	Ser	Ala	Gly	Arg	Val	Gln	Ser	Pro	Ala	Val	Phe	Leu	
85						90						95				
Val	Val	Leu	Arg	Glu	Arg	Glu	Ile	Arg	Asn	Phe	Gln	Val	Ile	Asn	His	
100						105						110				
Phe	Gly	Val	Arg	Leu	Phe	Phe	Ala	Asp	Val	Ser	Arg	Gly	Thr	Thr	Trp	
115						120						125				
Tyr	Ala	Glu	Trp	Gln	Pro	Val	Pro	Asp	Phe	Ala	Ser	Lys	His	Phe	Pro	
130						135						140				
Tyr	Val	Gln	Asp	Ser	Asn	Leu	Ala	Gln	His	Val	Ala	Gly	Thr	Arg	Asn	
145	150						155						160			
Val	Val	Val	Glu	Ser	Cys	Glu	Asp	Arg	Lys	Ala	Glu	Arg	His	Pro	Pro	
165						170						175				
Ala	Pro	Phe	Ile	Ser	Ser	Thr	Leu	Gln	Gln	Ala	Ala					
180						185										

```
<210> 2081
<211> 319
<212> DNA
<213> Homo sapiens
```

```
<400> 2081
aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
60
aggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga
120
aaatcaacaa tcgctacaca acttgctcag aggctcaatt tgcctaattgt tttgcagacg
180
gacatgggtgt atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
300
gttgtagcga aggggttgg
319
```

```
<210> 2082
<211> 106
<212> PRT
<213> Homo sapiens
```

```

<400> 2082
Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
 1          5          10          15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
          20          25          30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
          35          40          45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
          50          55          60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```

65              70              75              80
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
              85              90              95
Arg Glu Cys Arg Val Val Arg Lys Gly Leu
              100              105

```

```
<210> 2083
<211> 382
<212> DNA
<213> Homo sapiens
```

```

<400> 2083
nngcctgatt gcgacatggc cgtcgagtgc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg tttggatgga
120
caccagccgg tcatttgtgc tgttgtccgc ttgtggctga aaaaatgtgc ggatgacagt
180
gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaatgctg ttcgacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgttgg
300
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtacgat
360
gaaaaggcag gagatgaagg tn
382

```

```
<210> 2084
<211> 127
<212> PRT
<213> Homo sapiens
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<400> 2084															
Xaa	Pro	Asp	Cys	Asp	Met	Ala	Val	Glu	Cys	Ala	Val	Thr	Arg	Lys	Gln
1				5					10					15	
Leu	Tyr	Thr	Ile	Ile	Pro	Thr	Val	Glu	Cys	Asn	Cys	Gly	His	Val	Phe
			20					25					30		
Cys	Phe	Gly	Cys	Gly	Leu	Asp	Gly	His	Gln	Pro	Val	Ile	Cys	Ala	Val
		35					40					45			
Val	Arg	Leu	Trp	Leu	Lys	Lys	Cys	Ala	Asp	Asp	Ser	Glu	Thr	Ser	Asn
	50					55					60				
Trp	Ile	Gly	Ala	Asn	Thr	Lys	Glu	Cys	Pro	Lys	Cys	Cys	Ser	Thr	Ile
65					70					75					80
Glu	Lys	Asn	Gly	Gly	Cys	Asn	His	Met	Thr	Cys	Arg	Lys	Cys	Lys	Tyr
				85					90					95	
Glu	Phe	Cys	Trp	Ile	Cys	Ser	Gly	Pro	Trp	Ser	Glu	His	Gly	Asn	Asn
			100					105					110		
Tyr	Tyr	Asn	Cys	Asn	Arg	Tyr	Asp	Glu	Lys	Ala	Gly	Asp	Glu	Gly	
		115					120					125			

```
<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens
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<400> 2085

nnggatccca aagaccgca tattgccatg gtgttccaaa actatgccct ctacccgcac
 60
 atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa
 120
 atccggcgtc gcgtaggagga agccgccgaa ctctcgacc tcaccgacta tctggaccgc
 180
 aaaccaagg cactctccgg tggccagcgg cagcgcgctg ccatggggcg cgctattgtt
 240
 cgttcccccc gcgctcttctt gatggacgag cctctttcta acctggatgc gcgctcgcgt
 300
 gtccgcaccc gcgcccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat
 360
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc
 420
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accacccgcg taacgcgt
 478

<210> 2086

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala
1			5						10					15	
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys
			20					25					30		
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala
		35					40					45			
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala
	50					55					60				
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val
65				70				75						80	
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp
			85					90					95		
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg
		100						105					110		
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala
		115				120						125			
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln
	130					135					140				
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala	
145					150					155					

<210> 2087

<211> 731

<212> DNA

<213> Homo sapiens

<400> 2087

gataattctc tacacggcat gagctgggga cgtacccccc ttgccaacgt cacctcacgg
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt
 120
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgtc gctgcaacgg ctactgcgtc
 180
 ggctcgatca atcgcagcaa tcacccccctc cccagggcag aagctaactc caataggcca
 240
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc
 300
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccggtgc gttggttaag
 360
 gctggattta gttccgccga cgcggtggct ctagcgccgc gtattgccag agaaatggca
 420
 aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg
 480
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa
 540
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg
 600
 gtggtcgcaa atcttgtcgc cgccggtctg acaagaagtt ggcaaaggct acggctgtcg
 660
 ccattgccgc aactgcgctc aatcccgcgc tcggggccgat cgcaaagact gagggcatta
 720
 aggctgagat c
 731

<210> 2088

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1				5					10					15	
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
			20					25					30		
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
			35				40					45			
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
	50					55					60				
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65				70					75					80	
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
			85					90						95	
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
			100					105							

<210> 2089

<211> 315

<212> DNA

<213> Homo sapiens

<400> 2089

accggtgtgg accagggtca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgta gcccatcatc
 120
 ttcgacaccg accacttcga ggggtacgag cgccccgcc tcgtgctgca cgaagtcacc
 180
 gatcaacttg gccaaagcgtt ccttgatttg gaaggcccag agccggctct cggctgggaa
 240
 tcgttggtgg cgtctctcac gagtcttgct gactctatgg ggatccgtct gaccggcatt
 300
 accgattcga tcccg
 315

<210> 2090
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2090
 Thr Gly Val Asp Gln Ala Gln Leu Arg Asp Ala Met Phe Ser Tyr Leu
 1 5 10 15
 Pro His His Lys Leu Gly Glu Phe Asp Ile Asp Leu Leu Leu Asp His
 20 25 30
 Arg Asp Ser Arg Gln Pro Ile Ile Phe Asp Thr Asp His Phe Glu Gly
 35 40 45
 Tyr Glu Arg Pro Arg Leu Val Leu His Glu Val Thr Asp Gln Leu Gly
 50 55 60
 Gln Ala Phe Leu Val Leu Gly Pro Glu Pro Ala Leu Gly Trp Glu
 65 70 75 80
 Ser Leu Val Ala Ser Leu Thr Ser Leu Val Asp Ser Met Gly Ile Arg
 85 90 95
 Leu Thr Gly Ile Thr Asp Ser Ile Pro
 100 105

<210> 2091
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 2091
 actcttgacc attgtctctg tctctgcgtt tttctctctg tctctctgtg tctctgtctc
 60
 tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgttng
 120
 agtctctgtc tcttttgtct ctgtctctct ctgtgtctct gccattttg gtctctgctt
 180
 tctttctct gtgtgtctct ccattttctgt ctctcttct ctgtctctct ccattttctgt
 240
 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt
 300
 ccattttctgt cccttcacgc gt
 322

<210> 2092
 <211> 107
 <212> PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1             5             10             15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
             20             25             30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
             35             40             45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
             50             55             60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
65             70             75             80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
             85             90             95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
             100             105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

```

gccggcgatca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctaccgcgc agagaccag gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggctaatt
240
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<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

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             20             25             30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Gly Gly Val Pro
             35             40             45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
             50             55             60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
65             70             75             80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

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<210> 2097
<211> 641
<212> DNA
<213> Homo sapiens
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<400> 2097

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<210> 2098

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2098

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Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala	Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu
			20					25					30		
Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu	Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp
		35					40					45			
Gln	Val	Leu	Gly	Val	Gln	Leu	Gly	Leu	Ser	Val	Arg	His	Pro	Pro	Pro
		50				55					60				
Arg	Leu	Thr	Ser	Gly	Ser	Leu	Pro	Ala	Arg	Arg	Gly	Pro	Gly	Pro	His
65					70				75						80
Cys	Arg	Cys	Ser	Thr	Cys	Cys	His	Ser	Ser	Pro	Pro	Gln	Ser	Cys	Leu
				85					90					95	
Ile	Leu	Thr	Pro	Pro	Ser	Leu	Cys	Val	Ser	Leu	Ser	Ala	Cys	Pro	His
			100					105					110		
Trp	Phe	Arg	Asp	Pro	Gln	Pro	Leu	Phe	Ile	Arg	Leu	Tyr	Leu	Thr	Leu
		115					120					125			
Ala	Leu	Pro	Leu	Thr	Leu	Pro	Leu	Ala	Pro	Pro	Val	Met	Pro	Leu	Thr
		130					135					140			
Leu	Ser	Leu	Pro	Gln	Pro	Pro	Ser	Cys	Gly	Pro	Glu	Asp	Asp	Ala	Gln
145					150					155					160
Leu	Gln	Leu	Ala	Leu	Ser	Leu	Ser	Arg	Glu	Glu	His	Asp	Lys	Val	Arg
				165					170					175	
Ala	Ala	Ser	Leu	Ser	Leu	Pro	Leu	Pro	Gly	Ala	Pro	Leu	Arg	Pro	Ala

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 Pro Thr Gly Ser Arg
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 <212> DNA
 <213> Homo sapiens

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<210> 2100
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 <213> Homo sapiens

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 Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
 35 40 45
 Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
 50 55 60
 Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
 65 70 75 80
 Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
 85 90 95
 Ser Ser Pro Leu Ala His Pro Thr Trp Pro
 100 105

<210> 2101
 <211> 549
 <212> DNA
 <213> Homo sapiens

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 gggtgaacca cgacaagaat gagttgctgg ccagccttct catccacctt gacgagctat
 180
 taacagtgtg gttggagacc ggaacgggtgc gggatcagta tgtggcccg c tgtgacacca
 240
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<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

Met	Gly	Arg	Asp	Glu	Leu	Pro	Leu	Pro	Thr	Ala	Thr	Ser	Leu	Ala	Leu
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Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
			20					25					30		
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
			35				40					45			
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
			50			55					60				
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65					70					75				80	
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85					90						95	
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
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Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

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 120
 tgggaggggg acgcatatcg gtacgaccag gttggtatgg aaatcaaagg gaatgacgtc
 180

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 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

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His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
			20					25					30		
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
		35					40					45			
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
	50					55					60				
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70					75				80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
				85					90					95	
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105					110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
		115					120					125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
	130					135					140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
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<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

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 180
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 240
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<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

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			20					25					30		
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr
		35				40					45				
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn
	50					55					60				
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly
65					70				75					80	
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu
			85						90				95		
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
			100					105					110		
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val
	115						120					125			
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala
	130					135					140				
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn
145				150					155					160	
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro
			165						170					175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu
			180					185					190		
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
	195					200					205				
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly
	210					215					220				
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225 230 235 240

<210> 2107
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 2107
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 180
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 305

<210> 2108
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 2108
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 Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala
 35 40 45
 Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro
 50 55 60
 Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg
 65 70 75 80
 Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro
 85 90

<210> 2109
 <211> 700
 <212> DNA
 <213> Homo sapiens

<400> 2109
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 180
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 360
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<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

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Asp	Asn	Pro	Arg	Thr	Phe	Ser	Arg	Arg	Pro	Pro	Ala	Gln	Ala	Ser	Arg
			20					25					30		
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
		35					40					45			
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr
	50					55				60					
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
65					70					75				80	
Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
				85					90					95	
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
			100					105					110		
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
		115					120					125			
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
	130					135					140				
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
145					150					155				160	
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
				165					170					175	
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
		180					185						190		
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
		195					200						205		
Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
	210					215						220			
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225					230										

<210> 2111
 <211> 339
 <212> DNA
 <213> Homo sapiens

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 120
 gccgagctgg tggccctggc tgagctgttc atgccaatca agctgggtgcc gaagcaattt
 180
 gaaggcctgg ttgagcgtgt gcgcagtgtc cttgagcgtc tgcgtgccca agagcgcgca
 240
 atcatgcagc tctgcgtacg tgatgcacgc atgccgcgtg ccgacttccct gcgccagttt
 300
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 339

<210> 2112
 <211> 113
 <212> PRT
 <213> Homo sapiens

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 20 25 30
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 35 40 45
 Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val
 50 55 60
 Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala
 65 70 75 80
 Ile Met Gln Leu Cys Val Arg Asp Ala Arg Met Pro Arg Ala Asp Phe
 85 90 95
 Leu Arg Gln Phe Pro Gly Asn Glu Val Asp Glu Ser Trp Thr Asp Ala
 100 105 110
 Leu

<210> 2113
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 120
 aaagggaagt tgacattaga tagcagtttt aacatcgcca gccagcttc ccaggcctgg
 180

at tt t t t g c a c t t c t g t c a a a a a c t g a g a a a c c a a a c a t t c t t t a c c a g a c t g a t g a a c a g
240
g a c t t t c a c c a g c t g c t t c a t t g a g a c a t t c a a a c a g t g g a t g g a a a a c c a g g a c t g t g a t
300
g a g c c t g c c c t g t a c c c a t g c t g c a g c c a c t g g a g c t t c c c t a c a a g c a a g a g a t t t t t
360
g a a c t g t g c a t c a a g a g a g c t a t c a t g g a g c t g g a a a g g a g t a c a g g g t a c c a t t t g g a t
420
a g c a a a a c c c c a g g g c c g a g g t t t g a t a t c a a t g a t a c t a t c a g g g c a g t g g t g t t a g a g
480
t t c c a g a g t a c c t a c c t c t t c a c a c t g g c t t a t g a a a a g a t g c a t c a g t t t t a t a a a g a g
540
g t g g a c t c g t g g a t a t c c a g t g a g c t g a g c t g a g t c g g c c c c t g a a g g c c t c a g c a a t g g t t g g
600
t t t g t c a g c a a t c t g g a g t t c t a t g a c c t c a g g a t a g c c t c t c c g a t g g c a c c c t c a t t
660
g c c a t g g g g c t g t c a g t t g c t g t t g c a t t t a g c g t g a t g c t g c t g a c a a c t t g g a a c a t c
720
a t c a t a a g c c t t t a t g c c a t c a t t t c a a t t g c t g g a a c g a t a t t t g t c a c t g t t g g t t c t
780
c t t g t c c t g c t g g g c t g g g a g c t c a a t g t g t t g g a a t c t g t c a c c a t t t c g g t t g c c g t c
840
g g c t t g t c t g t a g a c t t t g c c g t c c a t t a t g g g g t t g c c t a c c g c t t g g c t c c a g a t c c c
900
g a c c g a g a a g g c a a a g t g a t c t t c t c t c t g a g t c g c g t g g g c t c t g c g a t g g c c a t g g c t
960
g c c c t g a c c a c c t t c g t g g c a g g g g c c a t g a t g a t t c c c t c c a c a g t t c t a g c t t a c a c c
1020
c a g c t g g g c a c c t t c a t g a t g c t c a t c a t g t g a t a c a g t t g g g c t t t c g c a c c t t c t t t
1080
t t c c a g t g c a t g t g c c g g t g c c t t g g a c c a c a g g g t a c c t g t g g t c a g a t t c c t t t a c c t
1140
a a a a a a c t a c a g t g c a g t g c c t t t t c c c a t g c c t t g t c t a c a a g t c c c a g t g a c a a g g g a
1200
c a a a g c a a a a c a c a t a c c a t a a a t g c t t a t c a t t t a g a t c c a g g g g c c c a a a a t c t g a a
1260
c t g g a g c a t g a g t t t t a t g a a t a g a a c c t c t g g c t t c c c a c a g c t g c a c t g c c c c t g a g
1320
a a g a c c a c t t a t g a a g a g a c c c a c a t c t g c t c t g a a t t t t t c a a c a g c c a a g c a a a g a a t
1380
t t a g g g a t g c c t g t g c a t g c a g c t t a c a a c a g t g a a c t c a g c a a a a g c a c t g a a a g t g a c
1440
a c t g g c t c t g c c t t g t t a c a g c c c c t c t t g a a c a g c a t a c c g t g t g t c a c t t c t t c t c t
1500
c t g a a t c a g a g a t g t a g c t g c c c c c g a t g c c t a c a a a c a c t t g a a c t a t g g c c c a c a c t c t
1560
t g c c a g c a g a t g g g g g a c t g c t t g t g c c a c a g t g c t c t c t a c c a c t a g c a g c t t t g t c
1620
c a g a t c c a a a a c g g c g t g g c a c c t c t g a a g g c c a c a c c a a g c t g t c g a g g g c t t t g t g
1680
c a c c c c a t c a c g c a c a t c c a c c a c t g t c c c t g c c t g c a g g g c a g a g t a a a g c c a g c c g g a
1740
a t g c a g a a t t c t c t g c c t a g g a a t t t t t t c c t c c a c c c a g t g c a g c a c a t t c a g g c c c a a
1800

gaaaaaattg gcaagaccaa tgtacacagt cttcagagga gcatagaaga gcatcttcca
 1860
 aagatggcag agccatcgtc atttgtctgc agaagcactg gatcgttact caaaacgtgt
 1920
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 1980
 agcagtggag ggactgaaaa caaggcagga gggaaagtgg agctgagctt gtcacagacg
 2040
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 2100
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 2160
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 2220
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<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

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			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
		35					40					45			
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
	50					55					60				
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
65					70					75				80	
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
				85						90				95	
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100					105					110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
			115					120					125		
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
			130				135					140			
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
145					150					155				160	
Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
				165					170					175	
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180					185					190		
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
			195				200						205		
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
		210					215					220			
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

225					230					235				240
Ile	Ile	Ser	Leu	Tyr	Ala	Ile	Ile	Ser	Ile	Ala	Gly	Thr	Ile	Phe
				245					250					255
Thr	Val	Gly	Ser	Leu	Val	Leu	Leu	Gly	Trp	Glu	Leu	Asn	Val	Leu
			260					265					270	
Ser	Val	Thr	Ile	Ser	Val	Ala	Val	Gly	Leu	Ser	Val	Asp	Phe	Ala
		275						280				285		
His	Tyr	Gly	Val	Ala	Tyr	Arg	Leu	Ala	Pro	Asp	Pro	Asp	Arg	Glu
	290					295				300				
Lys	Val	Ile	Phe	Ser	Leu	Ser	Arg	Val	Gly	Ser	Ala	Met	Ala	Met
305					310					315				320
Ala	Leu	Thr	Thr	Phe	Val	Ala	Gly	Ala	Met	Met	Ile	Pro	Ser	Thr
				325					330					335
Leu	Ala	Tyr	Thr	Gln	Leu	Gly	Thr	Phe	Met	Met	Leu	Ile	Met	Cys
		340						345					350	
Ser	Trp	Ala	Phe	Ala	Thr	Phe	Phe	Phe	Gln	Cys	Met	Cys	Arg	Cys
	355						360				365			
Gly	Pro	Gln	Gly	Thr	Cys	Gly	Gln	Ile	Pro	Leu	Pro	Lys	Lys	Leu
370						375				380				
Cys	Ser	Ala	Phe	Ser	His	Ala	Leu	Ser	Thr	Ser	Pro	Ser	Asp	Lys
385					390					395				400
Gln	Ser	Lys	Thr	His	Thr	Ile	Asn	Ala	Tyr	His	Leu	Asp	Pro	Arg
				405					410					415
Pro	Lys	Ser	Glu	Leu	Glu	His	Glu	Phe	Tyr	Glu	Leu	Glu	Pro	Leu
		420						425					430	
Ser	His	Ser	Cys	Thr	Ala	Pro	Glu	Lys	Thr	Thr	Tyr	Glu	Glu	Thr
	435						440				445			
Ile	Cys	Ser	Glu	Phe	Phe	Asn	Ser	Gln	Ala	Lys	Asn	Leu	Gly	Met
450						455				460				
Val	His	Ala	Ala	Tyr	Asn	Ser	Glu	Leu	Ser	Lys	Ser	Thr	Glu	Ser
465					470					475				480
Thr	Gly	Ser	Ala	Leu	Leu	Gln	Pro	Pro	Leu	Glu	Gln	His	Thr	Val
				485					490					495
His	Phe	Phe	Ser	Leu	Asn	Gln	Arg	Cys	Ser	Cys	Pro	Asp	Ala	Tyr
			500					505				510		
His	Leu	Asn	Tyr	Gly	Pro	His	Ser	Cys	Gln	Gln	Met	Gly	Asp	Cys
	515						520					525		
Cys	His	Gln	Cys	Ser	Pro	Thr	Ser	Ser	Phe	Val	Gln	Ile	Gln	Asn
	530					535				540				
Gly	Val	Ala	Pro	Leu	Lys	Ala	Thr	His	Gln	Ala	Val	Glu	Gly	Phe
545					550					555				560
His	Pro	Ile	Thr	His	Ile	His	His	Cys	Pro	Cys	Leu	Gln	Gly	Arg
				565				570						575
Lys	Pro	Ala	Gly	Met	Gln	Asn	Ser	Leu	Pro	Arg	Asn	Phe	Phe	Leu
			580					585				590		
Pro	Val	Gln	His	Ile	Gln	Ala	Gln	Glu	Lys	Ile	Gly	Lys	Thr	Asn
	595						600				605			
His	Ser	Leu	Gln	Arg	Ser	Ile	Glu	Glu	His	Leu	Pro	Lys	Met	Ala
	610					615				620				
Pro	Ser	Ser	Phe	Val	Cys	Arg	Ser	Thr	Gly	Ser	Leu	Leu	Lys	Thr
625					630					635				640
Cys	Asp	Pro	Glu	Asn	Lys	Gln	Arg	Glu	Leu	Cys	Lys	Asn	Arg	Asp
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Ser	Asn	Leu	Glu	Ser	Ser	Gly	Gly	Thr	Glu	Asn	Lys	Ala	Gly	Gly


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<211> 461
<212> DNA
<213> Homo sapiens
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120
ggtcttgggt ccttgggagc caccaagtcc acaaccacct gctctgaata gaaagctgac
180
attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg
240
tgtgtgccct tctgtggtca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
300
ctccatgccc agccggtggg cagctggggc ggggtggacct ccagcttctg cccgacgggg
360
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
420
gggaaaacat gtcccatcc gtgggaagtg gagccacgtg g
461
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<210> 2116
<211> 146
<212> PRT
<213> Homo sapiens
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			20					25					30			
Gly	Gly	Pro	Pro	Ala	Pro	Ala	Ala	His	Arg	Leu	Gly	Met	Glu	Met	Pro	
		35					40					45				
Ser	Pro	Gly	Ser	Ser	Arg	Gln	Arg	Thr	Arg	Glu	Met	Thr	Thr	Glu	Arg	
	50					55					60					
His	Thr	Pro	Ala	Pro	Ser	His	Ser	Ser	Pro	Gln	Ile	Ser	Pro	Ser	Asp	
65					70					75					80	
Ala	Ala	Val	Arg	Phe	Asn	Val	Ser	Phe	Leu	Phe	Arg	Ala	Gly	Gly	Cys	

				85					90					95					
Gly	Leu	Gly	Gly	Leu	Gln	Gly	Pro	Lys	Thr	Ser	Arg	Trp	Ala	Gln	Glu				
			100					105					110						
Gly	Asp	Arg	His	Pro	Pro	Phe	Gln	Ile	Leu	Glu	Tyr	Pro	Glu	Ala	Pro				
		115					120					125							
Ser	Gly	Arg	Glu	Gly	Gly	Val	Ser	Gly	Glu	Pro	Ala	Pro	Arg	Pro	Glu				
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Thr	Arg																		
145																			

<210> 2117

<211> 360

<212> DNA

<213> Homo sapiens

<400> 2117

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cgcgccagcg ttaagacctt ctcgcgggct gtcaccgccg atctggagaa gtgtggaccg
120
atcaggtgac actcgcggtg gactgaatag atgcctgagt ctgaagacac tgtgtggctg
180
acccaagagg ccttcgataa gctcacccag gagctggagt acctcaaagg cgaaggccgc
240
accgtcattg ccaacaagat tgccgacgcc cgttcggaag gcgacctttc tgagaacggc
300
ggctaccatg ccgcccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag
360

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<210> 2118

<211> 70

<212> PRT

<213> Homo sapiens

<400> 2118

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Lys	Leu	Thr	Gln	Glu	Leu	Glu	Tyr	Leu	Lys	Gly	Glu	Gly	Arg	Thr	Val				
			20					25				30							
Ile	Ala	Asn	Lys	Ile	Ala	Asp	Ala	Arg	Ser	Glu	Gly	Asp	Leu	Ser	Glu				
		35				40					45								
Asn	Gly	Gly	Tyr	His	Ala	Ala	Arg	Glu	Glu	Gln	Gly	Gln	Ala	Glu	Ala				
	50					55					60								
Arg	Ile	Arg	Gln	Leu	Glu														
65				70															

<210> 2119

<211> 465

<212> DNA

<213> Homo sapiens

<400> 2119

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 120
 atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgtactc
 180
 actgttctgt ggctgttctc ctacagtaaag gccgactcaa aagccattac aacctctctt
 240
 acaacaaaat ggttttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
 300
 agtcaagaga aattttggaa tttttagaaa gccagtcaaa atattggatc atcagatcat
 360
 gacggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
 420
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<210> 2120

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2120

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Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
			20					25					30		
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35					40					45			
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
	50					55					60				
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
65					70					75				80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90						95	
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
			100					105						110	
Leu	His	Ala													
			115												

<210> 2121

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2121

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 120
 ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc
 180
 tactattcaa ctgactatga gtttctgggc tcttttcaca atggagtgtc cgagggagat
 240
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctggtg
 300

tttctgatta ttgtgacatc aatagccttg cttggt
336

<210> 2122
<211> 112
<212> PRT
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<400> 2122
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Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr
35 40 45
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr
50 55 60
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp
65 70 75 80
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile
85 90 95
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val
100 105 110

<210> 2123
<211> 426
<212> DNA
<213> Homo sapiens

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cagcaactga ccgacgaact ggaagcgatg ctctgcgccg ccacaggtta tgacgcgatc
120
tccctgcagc cgaacgctgg ctcccagggc gagtacgccg gtctgctggc gatccgcgct
180
taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgtc ctctgccac
240
ggcaccaacc cggcaaccgc caacatggcc ggcattgcgc tggtcgtgac cgcttgcgac
300
gcccgcggca acgtcgacat cgaagacctg cgcgccaaagg ctatcgagca ccgcgaacac
360
ctcgcggcgc tgatgatcac ctaccgctcg acccacggcg tggtcgaaga aggcattccgc
420
gagatc
426

<210> 2124
<211> 142
<212> PRT
<213> Homo sapiens

<400> 2124
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln

```

      1             5             10             15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20             25             30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35             40             45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50             55             60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65             70             75             80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85             90             95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100            105            110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115            120            125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130            135            140

```

<210> 2125

<211> 285

<212> DNA

<213> Homo sapiens

<400> 2125

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ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattgggt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

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<210> 2126

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2126

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Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
      1             5             10             15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20             25             30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35             40             45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50             55             60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65             70             75             80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85             90             95

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<210> 2127
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 2127
 atggcagcca agatgcttgc attgttcgct ctccctagctc tttgtgcaag cgccactagt
 60
 gcgacgcata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc
 120
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccctgatg
 180
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
 240
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg
 300
 agcatgatgt cgcaaataat gatgccacaa tgtcactgcg acgccgtctc gcagattatg
 360
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc
 420
 ttacagcaac cctttgttgg tgctgcattc taga
 454

<210> 2128
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 2128
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala
 1 5 10 15
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met
 20 25 30
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
 35 40 45
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
 50 55 60
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
 65 70 75 80
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
 85 90 95
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His
 100 105 110
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met
 115 120 125
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
 130 135 140
 Phe Val Gly Ala Ala Phe
 145 150

<210> 2129
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2129

acgcgtgact tggatgaaca acccatatcc atcacccctc tcggtgttga tacggaaata
 60
 ctcacgcctt ttgacaagcg gcgtgatgag aacggcggtg acgggggtgt gcgcatcggg
 120
 actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg
 180
 gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcgcccc agacgagaat
 240
 cccctcaagg tcttggctcg ccgtcttctc ccggacgggt cgggtggagt tcgcgggtgcc
 300
 attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc
 354

<210> 2130

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2130

Thr	Arg	Asp	Leu	Val	Asn	Lys	Pro	Ile	Ser	Ile	Thr	Pro	Phe	Gly	Val
1				5					10					15	
Asp	Thr	Glu	Ile	Leu	Thr	Pro	Phe	Asp	Lys	Arg	Arg	Asp	Ala	Asn	Gly
		20						25					30		
Gly	Asp	Gly	Val	Val	Arg	Ile	Gly	Thr	Ile	Lys	Ala	Leu	His	Ser	Lys
		35					40					45			
Tyr	Gly	Ile	Gly	Glu	Leu	Ile	Arg	Ala	Phe	Ser	Arg	Val	His	Asp	Glu
	50					55					60				
Arg	Pro	Asn	Thr	Val	Leu	Arg	Ile	Trp	Gly	Gly	Gly	Pro	Asp	Glu	Asn
65					70				75					80	
Pro	Leu	Lys	Val	Leu	Ala	Arg	Arg	Leu	Val	Pro	Asp	Gly	Ser	Val	Glu
			85					90					95		
Phe	Arg	Gly	Ala	Ile	Asp	His	Ser	Glu	Val	Arg	Asn	Ala	Leu	Gly	Ser
		100						105					110		
Leu	Asp	Ile	Phe	Ala	Ala										
		115													

<210> 2131

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2131

gcacgcggc cattgggttat gtgtgcctat tccattgggt atgtggaagg ttgggatcag
 60
 ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac
 120
 ctgatgaaga cggtagaggg gcgggcaggg tgcattgagt attatgaaat gctcaacgaa
 180
 caacgccccg acttgtctta tgacatagac ggtattgttt ataaagtga tcagattgac
 240
 ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaattt
 300

cctgctcaag aagaagttac gcgt
324

<210> 2132
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2132
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu
1 5 10 15
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly
20 25 30
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala
35 40 45
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp
50 55 60
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp
65 70 75 80
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile
85 90 95
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg
100 105

<210> 2133
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2133
ggtacctgca atatggtatt gcatgacatg aataaatttt tccttactct gaactcacta
60
gtggctgtct ttagaggacc cggcgaactt ttcttgcttt ttcccacttg ctccatcaca
120
tatatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac
180
accagattac atcgctgtgg atccaaccct gcattttcct gccccctcctt tactgcgagt
240
gtcacctcta cccggaagg tcttcaacct ccaagtttcc cagtaattta tt
292

<210> 2134
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2134
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu
1 5 10 15
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr
20 25 30
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His
35 40 45
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

50	55	60
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr		
65	70	75
Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr		80
85	90	

<210> 2135
 <211> 439
 <212> DNA
 <213> Homo sapiens

<400> 2135
 acgcgttcca ttggtgtgtc gaatttcaag accgagcatc tggacgccat cgagggggcc
 60
 actccgagcg tcgaccaaat cgagatgcat ccctcgttca accaggcgac cttccgcgca
 120
 gagctggccg agcgcggcat taaccggag gcctggagcc cgctgggcca gtcgaaggac
 180
 ctcgacaatc ccgtcctcac cgatatattcc aaggcgactg gaaagacgcc tgcccaggtg
 240
 gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
 300
 cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
 360
 attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgactttctga
 420
 ttctgcaaca ataaccggt
 439

<210> 2136
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2136
 Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala
 1 5 10 15
 Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
 20 25 30
 Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
 35 40 45
 Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
 50 55 60
 Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
 65 70 75 80
 Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
 85 90 95
 Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
 100 105 110
 Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
 115 120 125
 Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
 130 135

<210> 2137
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 2137
 nncctttgcc ttggctgata ccctcaccac ctgggaacat ccccagaca ccctcttaac
 60
 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg
 120
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc
 180
 tcttccggtg agacacccgc tcagccagag aagacgagtg gcatggaggt ggctcgtac
 240
 ctggtggctc agtatgggga gcagcgggcc tgggacctag ccctccatac ctgggagcag
 300
 atggggctga ggtcactgtg cgcccaagcc
 330

<210> 2138
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 2138
 Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1 5 10 15
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
 20 25 30
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
 35 40 45
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
 50 55 60
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
 65 70 75 80
 Ser Leu Cys Ala Gln Ala
 85

<210> 2139
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 2139
 gagcagttga ggcgccagaa caccgggatc aacagcaacc tgtcggacat ggccggccag
 60
 gtgaacaagc tggcgagtac catcgcccag tacaacgatc agatttccaa agtcaccacc
 120
 gccgcgggtg ccccgaacga cctgctggac cagcgcagcg aggcggtgcg ccagttgtcc
 180
 gagctggtcg ggacccaggt ggtccagcgc ggttcgagtt atgacgtcta tatcggcagc
 240
 ggtcagcgcc tgggtgatggg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac
 300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc
 360
 acgggtgaccg gtggcgagat cgggtggtctg ctgcgctatc gcagcgatgt gctcgacccg
 420
 tcgatcaacg cgt
 433

<210> 2140
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 2140
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp
 1 5 10 15
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn
 20 25 30
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu
 35 40 45
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly
 50 55 60
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser
 65 70 75 80
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val
 85 90 95
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly
 100 105 110
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly
 115 120 125
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala
 130 135 140

<210> 2141
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 2141
 nnatatccat gcagcgatcc tcatcaattt gctgtgttat taggctttgg tgcgacggct
 60
 gtttatacctt atctttcttt ccgcttgatc aatgatatgg tggataaagg cgaagtgtta
 120
 ggtgacccaa ttgcttgtca tgtaaataat cgtaaaggta ttaacaaagg cttgatgaaa
 180
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtgcgca attgtttgaa
 240
 gcggttggtc tggataactaa agtggtcgac ctttgtttca aaggcgttgc aagtcgtatc
 300
 aaaggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgcaa taatgcttgg
 360
 aagttacgta aacctattca acagggcggg tatcttaaata acgtacatga ctctgagtat
 420
 cagcgc
 426

<210> 2142
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2142
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
 1 5 10 15
 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
 20 25 30
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
 35 40 45
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
 50 55 60
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
 65 70 75 80
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
 85 90 95
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
 100 105 110
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
 115 120 125
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
 130 135 140

<210> 2143
 <211> 1008
 <212> DNA
 <213> Homo sapiens

<400> 2143
 gccggcttga caagcatgtt caccggtgac gctgtcgtga tcgtcgaggt gagccaattg
 60
 tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg
 120
 cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttgtcga taacctcggg
 180
 acggtcctca gcccctccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg
 240
 acgctcaaga gcacatatga gtacctcgg ctcacgacg gtcacgatct acccgacgac
 300
 gatggctacg ctcatgatca tctggctcgc gctttgcgcc cgtatttggt gaatggtgga
 360
 gacagtcggc aggcccacgt cacccaactc atggcggcgt catccctgaa aacctcaac
 420
 gcgttgctcg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggtgc
 480
 atcacgagaa agacgggtgat gacggatctg cccatcgca cgatgaggcg ggagatcggc
 540
 ctgtccaacg acgggttggt cctcacaccg tggaagggtca agacgacttc ttccgaggag
 600
 gctcggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc
 660

gagaaatggg ggtgggagtc gatctcggac gggatatttgc gccatctcga gacctacagt
 720
 ggccccagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct
 780
 cgttcccagt tgcaacgcat cggcgacagt ctgcgggatg cgccatatcc gaggaaggac
 840
 cttggtcggg cgctcattcg caatggaaag cgggtcaagg acaagtgcag tatcgaatcg
 900
 gcgtacctgt tgagggtattc cgggaattgg gcgtgggtgac atgacgggttt cttggcaagg
 960
 tgtgaccaag acattcccct cgggcgattc cgcgcggtggg ggggtgcac
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
1				5					10					15	
His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala
		35					40					45			
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
		50				55					60				
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65					70					75					80
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
				85					90					95	
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115					120					125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
		130					135				140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145					150					155					160
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
				165					170					175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
			180					185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
		195					200					205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
		210				215					220				
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225					230					235					240
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
				245					250					255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
			260				265					270			
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

275 280 285
 Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn
 290 295 300
 Trp Ala Trp
 305

<210> 2145
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 2145
 tctagaatcg tgtataacat tctacacaat aagctaagcc tactcttgta gagtgcgac
 60
 atgacaaccc ttgaacaatc attatctcaa attcccgcac tttcgattat tcatgaacat
 120
 ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt
 180
 agcacagtca ttaaccttgc tttaactaat gcttcaaadc atcttgagaa tgaagaccgt
 240
 atttggttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct
 300
 gctgagcagt gcttattagt tttagatttg attgatcatt tagtgcaaaa tgaaattgtt
 360
 tggatacatt gcgcacaaaa taaacgcgt
 389

<210> 2146
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2146
 Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile
 1 5 10 15
 Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu
 20 25 30
 Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu
 35 40 45
 Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp
 50 55 60
 Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser
 65 70 75 80
 Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln
 85 90 95
 Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg
 100 105

<210> 2147
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 2147

ctccctgcgg gctgcgtctc cgaggacatg tgcagtcctg acccctgttt caatggtggg
 60
 acttgccctcg tcacctggaa tgacttccac tgtacctgcc ctgccaatTT cacggggcct
 120
 acatgtgccc agcagctgtg gtgtcccggc cagccctgtc tcccacctgc cacgtgtgtg
 180
 gcggaggcca cgttccgcga ggggtcccccc gccgcgttca gcgggcacaa cgcgt
 235

<210> 2148
 <211> 78
 <212> PRT
 <213> Homo sapiens

<400> 2148
 Leu Pro Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys
 1 5 10 15
 Phe Asn Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr
 20 25 30
 Cys Pro Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys
 35 40 45
 Pro Gly Gln Pro Cys Leu Pro Pro Ala Thr Cys Val Ala Glu Ala Thr
 50 55 60
 Phe Arg Glu Gly Pro Pro Ala Ala Phe Ser Gly His Asn Ala
 65 70 75

<210> 2149
 <211> 1474
 <212> DNA
 <213> Homo sapiens

<400> 2149
 ntactgccac cattggaact tttgatgttg atggggaaga gttgcaacac ctccaggggtt
 60
 gtccctgctga tgggtggctgc gaatgatttg ccttgacaat agctgaaaaa ccaccatctg
 120
 caacacgtgg gagtaagact tctcctgctc tttgccagtg gtctgaggtg atgaaccacc
 180
 ctggcttggt gtgctgtgtc cagcaaacta caggggtgcc gctggtagtt atggtgaaac
 240
 cagacacttt tcttatccac gagattaaga ctcttctctgc taaagcgaag atccaagaca
 300
 tgggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgctgt
 360
 gtgaggatgg cagcctgcgc atttacatgg ccaacgtgga gaacacctcc tactggctgc
 420
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa
 480
 cagctacaat cacaaccng cacgtctagc caggtgactt tccccattga cttttttgaa
 540
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat
 600
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc
 660

ggaggttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgagg
 720
 atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat cttcggcaga
 780
 actatgcagc tcaacctgag tcgctcacgc tggtttgact tccccttcac cagagaagaa
 840
 gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcgggtgga tccagcaggt
 900
 gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct
 960
 gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaactctg
 1020
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtgggaact
 1080
 gtccctggaga ggctgggtgt gagttcttta gaagccctgg aaagctgctt tgccgttggc
 1140
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg
 1200
 tccctgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac
 1260
 accagccgct cggcctacca cagccacaag gtaactgttc tctcagggaa aggaaattgc
 1320
 agtgctgaca gggaatcaaa taagttagct cttcattgta aagcaacagc acagcaaagt
 1380
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa
 1440
 attctcaagt gccactcaaa actgagggtg agcc
 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
1				5				10						15	
Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20					25					30			
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35				40					45				
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
	50				55					60					
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65				70				75						80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
			85				90					95			
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100					105					110			
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115				120					125				
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
	130				135						140				
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr


```

145          150          155          160
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
          165          170          175
Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
          180          185          190
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
          195          200          205
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
          210          215          220
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
225          230          235          240
Glu Leu Ala Thr Leu Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
          245          250          255
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
          260          265          270
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
          275          280          285
Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
          290          295          300
Gln Gln Ser Lys Val Glu Gly Gly
305          310

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<210> 2151
 <211> 511
 <212> DNA
 <213> Homo sapiens

<400> 2151
 gccggcggttt acctgtggggg cccgggtcggg cgcgggcaaga cctgggtgat ggatcaattc
 60
 caccaaagcc tgnncgggtg ccggcgcnng cggcagcact ttcactcatt catgggctgg
 120
 gtgcatcagc gctcctttca gttgaccggg atcgccgatc cattgcgggc gctgggtcgt
 180
 gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tggttcgtcaa tgacatcggt
 240
 gacgcgatca ttctcgggag cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggtc
 300
 tgcacctcca atctgccgcc ggatcagctg tatgccgacg gcttcaaccg cgaccgcttc
 360
 ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcgggtgaa tggcgcgga
 420
 gatcatcgct tgcattcccg cgccatcgag cagcggtact gggtcgctct gccggagcag
 480
 ggtagcgcgt tgagccaggt gttcgacgcg t
 511

<210> 2152
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 2152
 Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

1				5					10					15			
Met	Asp	Gln	Phe	His	Gln	Ser	Leu	Xaa	Gly	Cys	Arg	Arg	Xaa	Arg	Gln		
			20					25					30				
His	Phe	His	His	Phe	Met	Gly	Trp	Val	His	Gln	Arg	Ser	Phe	Gln	Leu		
		35					40					45					
Thr	Gly	Ile	Ala	Asp	Pro	Leu	Arg	Ala	Leu	Ala	Arg	Glu	Leu	Ala	Ala		
	50					55					60						
Glu	Val	Arg	Val	Leu	Cys	Phe	Asp	Glu	Leu	Phe	Val	Asn	Asp	Ile	Gly		
65					70					75				80			
Asp	Ala	Ile	Ile	Leu	Gly	Arg	Leu	Phe	Gln	Val	Met	Phe	Asp	Ala	Gly		
				85				90					95				
Val	Val	Val	Val	Cys	Thr	Ser	Asn	Leu	Pro	Pro	Asp	Gln	Leu	Tyr	Ala		
			100					105					110				
Asp	Gly	Phe	Asn	Arg	Asp	Arg	Phe	Leu	Pro	Ala	Ile	Thr	Ala	Ile	Lys		
		115				120						125					
Gln	His	Met	Gln	Val	Val	Ala	Val	Asn	Gly	Ala	Glu	Asp	His	Arg	Leu		
	130					135					140						
His	Pro	Gly	Ala	Ile	Glu	Gln	Arg	Tyr	Trp	Val	Ala	Leu	Pro	Glu	Gln		
145					150					155				160			
Gly	Ser	Ala	Leu	Ser	Gln	Val	Phe	Asp	Ala								
				165				170									

<210> 2153

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2153

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nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt
60
tcagtacgtg cacggcgatt ggcggcggca attgggacca ctccgcgctg atcaagggcc
120
tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga
180
tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagcccgtt
240
atgtcggtcg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
300
cacccccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
360
attgggcccc gcaaaaaccgc acccgccatg gccctcgctg tcgagaacgg ctggcaaggc
420
gaagtcaccg gcctgggtgg caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa
480
gtggtcgagg ccgctcaccg ggtgccggat gccgccggcc tggcggtg
528

```

<210> 2154

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2154

```

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```

1		5		10		15									
Ile	Asp	Ala	Ala	His	Pro	Arg	His	Val	Leu	Glu	Pro	Tyr	Leu	Pro	Ala
		20					25						30		
Asp	Arg	Thr	Gly	Arg	Val	Ile	Val	Ile	Gly	Pro	Gly	Lys	Thr	Ala	Pro
		35					40					45			
Ala	Met	Ala	Leu	Val	Val	Glu	Asn	Gly	Trp	Gln	Gly	Glu	Val	Thr	Gly
	50					55					60				
Leu	Val	Val	Thr	Arg	Tyr	Gly	His	Gly	Ala	Pro	Cys	Lys	Lys	Ile	Glu
65					70					75					80
Val	Val	Glu	Ala	Ala	His	Pro	Val	Pro	Asp	Ala	Ala	Gly	Leu	Ala	Val
				85					90					95	

<210> 2155

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2155

```

gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcggccccg actgcgaggt gtcaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttccg tgatgaagtg ctgccctact atgcggggcg cgccgtcgcg
180
gcgcgcgaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgcctgtgcg
240
cgcgccctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

```

<210> 2156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2156

Met	Pro	Arg	Arg	Tyr	Phe	Glu	Ala	Leu	Leu	Gln	Glu	Phe	Gly	Pro	Asp
1				5					10				15		
Cys	Glu	Val	Leu	Thr	Val	Thr	Asp	Ser	Glu	Gly	Asn	Pro	Leu	Ser	Ser
		20					25					30			
Val	Leu	Ser	Phe	Tyr	Phe	Arg	Asp	Glu	Val	Leu	Pro	Tyr	Tyr	Ala	Gly
		35				40					45				
Asp	Ala	Val	Ala	Ala	Arg	Glu	Leu	Ala	Ala	Asn	Asp	Phe	Lys	Tyr	Trp
	50				55					60					
Glu	Leu	Met	Arg	Arg	Ala	Cys	Ala	Arg	Gly	Leu	Lys	Val	Phe	Asp	Tyr
65				70					75					80	
Gly	Arg	Ser	Lys	Gln	Gly	Thr	Gly	Ser	Tyr	Ala					
				85					90						

<210> 2157

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2157

naccgagata acgagggtcgt catcatctcc actgggtccc aaggtgagcc acttttcggcc
 60
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccgtt
 120
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc
 180
 ctgacgaagc ttggcgccgc cgtggtacat aagggcaacg ctttggtcca cgtttccggc
 240
 catgccgcag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg
 300
 ccgattcatg gtgagggtgcg tcattctgtc gctaatagccg atctggccaa agcaaccggt
 360
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga
 420
 gtaccgcgag ttgttggcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg
 480
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcggtgagga gggattcttg
 540
 tcagtcgtca ccgtggtcga caccgctcg gcgtcagtgg tgtctcgccc ggcgatccag
 600
 gcgcgtggtt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc
 660
 gagctagaga aggcgatggc cggtggtatg gacgataccc accggttgca a
 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa Arg Asp Asn Glu Val Val Ile Ile Ser Thr Gly Ser Gln Gly Glu
 1 5 10 15
 Pro Leu Ser Ala Leu Ala Arg Ile Ala Asn Arg Glu His Arg Asp Ile
 20 25 30
 Glu Val Gly Glu Gly Asp Thr Val Leu Leu Ala Ser Ser Leu Ile Pro
 35 40 45
 Gly Asn Glu Asn Ala Val Tyr Arg Val Ile Asn Gly Leu Thr Lys Leu
 50 55 60
 Gly Ala Ala Val Val His Lys Gly Asn Ala Leu Val His Val Ser Gly
 65 70 75 80
 His Ala Ala Ala Gly Glu Leu Leu Tyr Ala Tyr Asn Ile Val Arg Pro
 85 90 95
 Arg Ala Val Met Pro Ile His Gly Glu Val Arg His Leu Val Ala Asn
 100 105 110
 Ala Asp Leu Ala Lys Ala Thr Gly Val Asp Glu Asn Asn Val Val Leu
 115 120 125
 Val Glu Asp Gly Gly Val Ile Asp Leu Val Asp Gly Val Pro Arg Val
 130 135 140
 Val Gly Lys Val Asp Ala Ser Tyr Ile Leu Val Asp Gly Ser Gly Val
 145 150 155 160
 Gly Glu Leu Thr Glu Asp Thr Leu Thr Asp Arg Arg Ile Leu Gly Glu
 165 170 175
 Glu Gly Phe Leu Ser Val Val Thr Val Val Asp Thr Arg Ser Ala Ser

				180				185					190			
Val	Val	Ser	Arg	Pro	Ala	Ile	Gln	Ala	Arg	Gly	Phe	Ala	Glu	Gly	Asp	
		195					200					205				
Ser	Val	Phe	Ala	Glu	Ile	Thr	Asp	Gln	Ile	Val	Thr	Glu	Leu	Glu	Lys	
	210					215					220					
Ala	Met	Ala	Gly	Gly	Met	Asp	Asp	Thr	His	Arg	Leu	Gln				
225					230					235						

```
<210> 2159
<211> 322
<212> DNA
<213> Homo sapiens
```

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<400> 2159
tcgcgagcac actccagcct ctggagagac gacaacgcgt gaagggggcac cagcttgcg
60
ggcagcagct ccagggggcgg cctgggaggg ctttgtgcag aagaagcctg tttccttcta
120
cctgttttga aaagtgtgtc ctgcagatgg tgggtgagag ttcgctgccca gggccactgt
180
cttccctgcc ctgcggacac ttcttcccca ctttctctaaa gctgtggggag acctggagcc
240
gtggagcadc aatggctctt tgactcagga atcttaaaaa atcacacctt ggggctacca
300
tggggggcctt ctgggttctcc tt
322
```

```
<210> 2160
<211> 100
<212> PRT
<213> Homo sapiens
```

```
<400> 2160
Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala
   1                               5           10          15
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly
                   20               25              30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
                35                     40            45
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
      50                         55                 60
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
65                       70               75             80
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
                  85                          90              95
Ser Val Leu Ala
                    100
```

```
<210> 2161
<211> 1070
<212> DNA
<213> Homo sapiens
```

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca
 60
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaagggtta
 120
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa
 180
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
 240
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct
 300
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca
 360
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga
 420
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag
 480
 ccagggcata aggttttgct gtccaggaag ctttggttga aaaatgtag aagtaatggg
 540
 tttggtcagt atggtgagag gtgagagagg ctaaagggga tgggcataaa gggcaggcca
 600
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga
 660
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccattggg aggggagtat
 720
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg
 780
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga
 840
 agaaagtgaa gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact
 900
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc
 960
 tggctagctg agtaaaggac catcgataaa aacagacaaa agttaagact agatggagtg
 1020
 gcaactaggc agatcagatg tttttttaa aggggaaact gctaagatct
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met Val Leu Tyr Ser Ala Ser Gln Leu Ser Leu Pro Ser Tyr Ser Ile
 1 5 10 15
 Ile Thr Leu Ile Gln Glu Trp Phe Leu Tyr Pro Pro Val Asn Thr Cys
 20 25 30
 Leu Ser Ser Ser His Pro Leu Thr Ser Ala Gly Thr Leu His Phe Leu
 35 40 45
 Leu Pro Phe Leu Ser Ser Ser Phe Cys Pro Arg Glu Ser Cys Cys Tyr
 50 55 60
 Ile Phe Cys Val Pro Pro Ser Phe Ser Cys His Leu Cys Val Ile Leu
 65 70 75 80
 Arg Asp Ser Met Gly Ser Ser Gly Tyr Ser Pro Pro His Gly His Ser

```

      85              90              95
Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
      100              105              110
Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
      115              120              125
Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
      130              135              140
Tyr
145

```

<210> 2163
 <211> 657
 <212> DNA
 <213> Homo sapiens

```

<400> 2163
tattttaaatc tttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc
60
ggcctccctc caatccacct ccacttccta caccacccc gctctcccc ccccccttt
120
tggttccggg ttggaagggt gggtgaaatg ggaaccgaat accaatttca cccgggaacc
180
agtaatgccc atgataaccg ccaagttggg accgaagttg ggatccataa gtacgggcgg
240
ccagtggggg ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctcgcgc
300
agacatgcca agaggctctc tctccaggag agccacctgt gaaaccacc cggcatgctc
360
ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct
420
cagacaggag tccgtcccggt ccagtcccat catcccaaga aacatccggc ccgactccct
480
gcagctccat ggtcaacaa ggtgoggatg cctgctggac ctggctgctt tccatccaac
540
tttgatccct tccccagag gaagagtgt acctagggac aagtgtggtg cgcacaggca
600
tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
657

```

<210> 2164
 <211> 152
 <212> PRT
 <213> Homo sapiens

```

<400> 2164
Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
1      5      10      15
Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
20     25     30
Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
35     40     45
Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
50     55     60
Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

65					70					75				80	
Gln	Glu	Ser	Val	Pro	Ser	Ser	Pro	Ile	Ile	Pro	Arg	Asn	Ile	Arg	Pro
				85					90					95	
Asp	Ser	Leu	Gln	Leu	His	Gly	Ser	Thr	Arg	Cys	Gly	Cys	Leu	Leu	Asp
			100					105					110		
Leu	Ala	Ala	Phe	His	Pro	Thr	Leu	Ile	Pro	Ser	Pro	Arg	Gly	Arg	Val
		115					120					125			
Leu	Pro	Arg	Asp	Lys	Cys	Gly	Ala	His	Arg	His	Ala	Ala	Trp	Ser	Leu
	130					135					140				
Ala	Gln	Ala	Ala	Cys	Ala	Asp	Ser								
145					150										

<210> 2165

<211> 962

<212> DNA

<213> Homo sapiens

<400> 2165

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nctttctcat cgacagcgcac gcacaaccgg cgacatcacc ggtgacgggt caaggtggca
60
gcccgagggc ccgccgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaadc accccagcgc ctcaccccc gaactctgttc gccatctgct gtcgcccctg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgaggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcttggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta ctccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgtgctg cactgccatc gttcactact cccgcgaggt ggccttcgcc
720
gccgccgagg ttacgcgcg agccgccgaa cgtcgcggtta cctgggatga acgtctggaa
780
tcctcgtcgt ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctgcgagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962

```

<210> 2166

<211> 239
 <212> PRT
 <213> Homo sapiens

<400> 2166
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 1 5 10 15
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
 20 25 30
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
 35 40 45
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
 50 55 60
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
 65 70 75 80
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Asp Ala Glu Pro Tyr
 85 90 95
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
 100 105 110
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
 115 120 125
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
 130 135 140
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
 145 150 155 160
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Gly Thr Trp Asp Glu
 165 170 175
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
 180 185 190
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
 195 200 205
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
 210 215 220
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
 225 230 235

<210> 2167
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 2167
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg
 60
 catccacatt atcccgactg gaagatctcg ccagggttacg gacagtgggtc gcgtagcgaa
 120
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg
 180
 attcttcgag cgggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttggcga
 240
 agcaccgcgg cgattgtggc tgtgtcgccg gccttgctct cgacgcgggtc gcgcggggtcg
 300
 tgcgctgac tcccacagca taccc
 325

<210> 2168
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2168
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
 1 5 10 15
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
 20 25 30
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
 35 40 45
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
 50 55 60
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
 65 70 75 80
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
 85 90 95
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
 100 105

<210> 2169
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 2169
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccg
 60
 atcctggaga aggtcgtaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac
 120
 ggggaggccc tgtccaccct cgtcgtaaat aagatccgcg gtaccttcag ctcggtggca
 180
 gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc
 240
 accggtggtc aggtcgtcgc tcccgaggtt gggctcaagc tcgaccaggt gggcctcgag
 300
 gttcagggc
 309

<210> 2170
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2170
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
 1 5 10 15
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
 20 25 30
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
 35 40 45
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

```

      50              55              60
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
65              70              75              80
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
      85              90              95
Val Gly Leu Glu Val Gln Gly
      100

```

<210> 2171
 <211> 518
 <212> DNA
 <213> Homo sapiens

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<400> 2171
cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcgggtgat
60
atcatcaaag tttcagtgaa ggaagcaatt cctcgcggaa aaattaaaaa aggtaatggt
120
cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
180
cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtacacgt
240
atctttggcc ctgtaaccgc tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
300
gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
360
aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
420
cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca
480
agcgggcggtg gaaggcggaa tcattgaaca gaatgcat
518

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<210> 2172
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 2172
Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
1              5              10              15
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
20              25              30
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Arg Thr
35              40              45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
50              55              60
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
65              70              75              80
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
85              90              95
Ile Val Ser Leu Ala Pro Glu Val Leu
100              105

```

<210> 2173
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2173
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
 60
 cgggcgcgtg ctttttgcgg cgggggtttcg agcattcatc tggatgcagc attttcgcag
 120
 gcatttcttg tatcctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac
 180
 ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca
 240
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa
 300
 agagagatgg agctctatgg ccccaaaaag cgtggacca agcccaaac ctctctctc
 360
 aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc
 420
 atccgatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg
 475

<210> 2174
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2174
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
 1 5 10 15
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
 20 25 30
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys
 35 40 45
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
 50 55 60
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
 65 70 75 80
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
 85 90 95
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
 100 105 110
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
 115 120 125
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
 130 135 140
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
 145 150 155

<210> 2175
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2175

cgcgacaccc tctttggtgg ggccttcct tctccgaatt cggaaccct ccagactctg
60
gcccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac
120
cgctcggtta tcattgatga ccaggggcat ttcttgcac ccaaccagat cctcgtattg
180
ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg
240
acgaccacc tgcttgaccg tgtcgccgag gccacgggc agacctgtta cgaggtaccg
300
gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtgag
360
tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatgggtgt ctatgctggc
420
accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt
462

<210> 2176

<211> 154

<212> PRT

<213> Homo sapiens

<400> 2176

Arg	Asp	Thr	Leu	Phe	Gly	Gly	Arg	Leu	Pro	Ser	Pro	Asn	Ser	Arg	Thr
1				5					10					15	
Leu	Gln	Thr	Leu	Ala	Gln	Glu	Val	Val	Glu	Arg	Gly	Ala	Asp	Ile	Gly
			20					25					30		
Ile	Ala	Thr	Asp	Gly	Asp	Ala	Asp	Arg	Leu	Gly	Ile	Ile	Asp	Asp	Gln
		35					40					45			
Gly	His	Phe	Leu	His	Pro	Asn	Gln	Ile	Leu	Val	Leu	Leu	Tyr	Thr	Tyr
	50					55					60				
Leu	Leu	Glu	Asp	Lys	Gly	Trp	Gln	Val	Pro	Cys	Val	Arg	Asn	Leu	Ala
65					70					75					80
Thr	Thr	His	Leu	Leu	Asp	Arg	Val	Ala	Glu	Ala	His	Gly	Gln	Thr	Cys
			85					90						95	
Tyr	Glu	Val	Pro	Val	Gly	Phe	Lys	Trp	Val	Ser	Ser	Lys	Met	Ala	Glu
			100					105					110		
Thr	Asn	Ala	Val	Ile	Gly	Gly	Glu	Ser	Ser	Gly	Gly	Leu	Thr	Val	Gln
		115					120					125			
Gly	His	Ile	Ala	Gly	Lys	Asp	Gly	Val	Tyr	Ala	Gly	Thr	Leu	Leu	Val
	130					135					140				
Glu	Met	Ile	Ala	Lys	Arg	Gly	Lys	Lys	Leu						
145						150									

<210> 2177

<211> 478

<212> DNA

<213> Homo sapiens

<400> 2177

ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg
60

accttggact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac
 120
 gacttttttg gtgtgaggtt tgtcggccct ggggcagatg atcgtgccct cttgtccac
 180
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg
 240
 tggccgggtg cggctgacca ggctggctcg aagtccgca gtcgacgtct gccggtcggc
 300
 gttcctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag
 360
 gtcacgcggg ccatgtctgg ccggcgcccc cgatcagctg cccgtcgaat ggcaagcacg
 420
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5				10						15	
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
		20						25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
	35						40					45			
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50					55					60				
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65					70					75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90					95		
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
			100					105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
	115					120						125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135						140			
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gagtggacgt cgagcgctcgc attaacgggg ccggcgcggt gggcgcacac
 60
 aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgctcgtc
 120
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cggccacgct cgatgtcgty
 180

ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag
 240
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn
 296

<210> 2180
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 2180
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
 1 5 10 15
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
 20 25 30
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
 35 40 45
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
 50 55 60
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln
 65 70 75 80
 Glu Arg Leu Ala Lys Ala Ala
 85

<210> 2181
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2181
 ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcat gcgcgcgctg
 60
 tcgattccccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc
 120
 acgctggcat cgccggaagc ggggtgtcgtc agcgaactga acgtgcgcga cgggtgcgatg
 180
 gtcgcgccgg ggcagacgct cgccaagatt tcgggcctct cgaagctctg gctgatcgtc
 240
 gagattccgg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc
 300
 tcgggcgatc cgacgcagca tttcaccggg cgtatccgcg agatcctgcc gggcatcacc
 360
 accagtagcc gcacgcttca ggccgcg
 387

<210> 2182
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2182
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
 1 5 10 15
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

		20					25				30				
Thr	Gly	Lys	Ala	Gln	Thr	His	Leu	Thr	Leu	Ala	Ser	Pro	Glu	Ala	Gly
		35					40					45			
Val	Val	Ser	Glu	Leu	Asn	Val	Arg	Asp	Gly	Ala	Met	Val	Ala	Pro	Gly
		50					55				60				
Gln	Thr	Leu	Ala	Lys	Ile	Ser	Gly	Leu	Ser	Lys	Leu	Trp	Leu	Ile	Val
65					70					75				80	
Glu	Ile	Pro	Glu	Ala	Leu	Ala	Leu	Asp	Ala	Arg	Pro	Gly	Met	Thr	Val
				85					90					95	
Asp	Ala	Thr	Phe	Ser	Gly	Asp	Pro	Thr	Gln	His	Phe	Thr	Gly	Arg	Ile
			100					105					110		
Arg	Glu	Ile	Leu	Pro	Gly	Ile	Thr	Thr	Ser	Ser	Arg	Thr	Leu	Gln	Ala
		115					120					125			

Arg

<210> 2183
 <211> 310
 <212> DNA
 <213> Homo sapiens

<400> 2183
 aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
 60
 ctgcattttc caagcagggga ggggtcgggc atggagaatg aaacattctg agaaaagact
 120
 taaatgtgga aacttttggg tcaagagggt attctaggag atacaagaaa tatctcctgg
 180
 gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccagagga
 240
 atagggatga aaaccataaa ctcccttggg tgggtattaa cttatcantc aaagttacca
 300
 tanataatgg
 310

<210> 2184
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2184
 Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
 1 5 10 15
 Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
 20 25 30
 Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
 35 40 45
 Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
 50 55 60
 Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
 65 70 75 80
 Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
 85 90 95
 Val Phe Gln Ala

100

<210> 2185
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 2185
 ngaatatcca tgcagcagct cgtcgacaat tttgacggtg ccatccctga cgatcttgac
 60
 tctcttgtga ccctgcccgg agtcggtcgt aagaccgcca atgttgtttt aggtaatgcc
 120
 ttcggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc
 180
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgc
 240
 tctgaatggg tgatgttgtg tcaccgcctc atctggcacg ggcggcgggcg ctgtcactcg
 300
 cggcgctcctg cctgcgggggt atgcccgggt gccgagtggg gcccgctcctt cggggaaggc
 360
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga
 420
 acgttttctcg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca
 480
 tagctcatca gcgtgaaaat gccggaatac cggggtgctc gcatttgccg tcggggccga
 540
 ttgcgaaaag ttccggggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat
 600
 gccttggtga ggggcccagc atctccatgt ctcgggagc atcgaggggc gtgaccgtcg
 660
 tgacgatctg ggcgtcgtgg tgtcgaccat gtcgtagtga ggctccgctc attgcgaacg
 720
 cgt
 723

<210> 2186
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2186
 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
 1 5 10 15
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
 20 25 30
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
 35 40 45
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
 50 55 60
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
 65 70 75 80
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
 85 90 95
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

atcaggagcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc
 300
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc
 360
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttggcg
 420
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttacc gcgtcgggc
 480
 ttacgcctgc attcctgtgc cgtcacgatc gccaccgagc acgacggggg tgtgccaac
 540
 agtgacgacg agctcgtcgc cctcccgggt attggcgact acaccgcgag cgcagtcgtc
 600
 tcttttgcgt ttggcgccg cgccacagt cttgacacca atgtacgtcg cctcatcgt
 660
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggtga gcgggtagtc
 720
 gccgacgcgt tggttcccga cgaagacgtc cgagcggcca agtgggcgggt ggcgtcgatg
 780
 gaattggggg cactggtatg cacggcgcg tctccgcagt gtgaggtctg cccgatccgg
 840
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccgcccg tcgaggacag
 900
 ccatggaagg gcacggatcg ccagtgcgc ggcgtgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaaggcca gatggtctt tccgcctggc ccgagctcga tcaggcatca
 1020
 aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa ccttattagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
 1140
 cgctgggtta tccttagagg cggtcctcaa attggatcag ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgcc gacgccgaca
 1260
 cattgtcgac catctgcgtt ctttggggca ctcggagtcc atcggagatc tttaccaact
 1320
 gttcgggtgc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa
 1380
 gatctggaag atttccgggg gagacgtcat ga
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20				25						30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35				40					45				
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50		55		60
Pro Thr Pro Asp Asp	Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala			
65	70	75	80	
Ala Trp Gly Arg	Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser			
	85	90	95	
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser				
	100	105	110	
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser				
	115	120	125	
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr				
	130	135	140	
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys				
	145	150	155	160
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val				
	165	170	175	
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu				
	180	185	190	
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys				
	195	200	205	
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn				
	210	215	220	
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys				
	225	230	235	240
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys				
	245	250	255	
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg				
	260	265	270	
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn				
	275	280	285	
Leu Ile Ser Leu				
	290			

<210> 2191

<211> 502

<212> DNA

<213> Homo sapiens

<400> 2191

nnacgcgtcg agaatctcta ctctgcccgc aacaacgtcc ggcttcgtca ggctcacgat

60

gactcccttg acgacgacac catttcggg ggtagcccac attggtgctg cctcatggac

120

tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc

180

agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc

240

cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc

300

gccgccggaa aagtgcgtcg ccactttttc gataaccggg ttgcctcaa ctacctggtc

360

aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg

420

cgtgccgaga tcacgaaata ctctggggc gatccgcaga aggtacacga cgccgtcgag

480

gctgggattg ccggtggtgc ac
502

<210> 2192

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2192

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Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
 1             5             10             15
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
      20             25             30
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
      35             40             45
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
      50             55             60
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
65             70             75             80
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
      85             90             95
Glu Ala Gly Ile Ala Gly Gly Ala
      100

```

<210> 2193

<211> 321

<212> DNA

<213> Homo sapiens

<400> 2193

```

ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc
60
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
120
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tcctccaca
180
agtcattgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga
240
cagaggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
300
tgtgtgtgtt taggttgggg a
321

```

<210> 2194

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2194

```

Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
 1             5             10             15
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
      20             25             30
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

	35					40					45								
Lys	Asn	Phe	Lys	Ser	Pro	Phe	Ile	Ser	Leu	His	Lys	Ser	Cys	Thr	Ala				
	50					55					60								
Asn	Arg	Asp	Thr	Leu	Phe	Ser	Leu	Glu	Thr	Leu	Leu	Cys	Ala	Gln	Thr				
65					70					75				80					
Glu	Val	Pro	Leu	Pro	Trp	Asp	Ser	Ser	Leu	Ala	Xaa	Arg	Gly	Arg	Arg				
				85					90					95					
Val	Cys	Val	Leu	Cys	Val	Phe	Arg	Leu	Gly										
			100					105											

<210> 2195
 <211> 504
 <212> DNA
 <213> Homo sapiens

<400> 2195
 nacgcgtctc cctacatcaa tgcccaccgc gattgcacct ttgttgatcat gctccctggc
 60
 gacgggtgtgg cacaccccaa ctttggcaat atcgccacag acctgggtgct gttgcacagc
 120
 ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag cgccttgag
 180
 gcacgaggcc tgggtgcgta ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
 240
 gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
 300
 gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
 360
 actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
 420
 cgggtggacc gcaagggcac caaccgctg ctcgatgagc gctcgattgt gctgctgtcg
 480
 cccttgggtt actcgccac cggt
 504

<210> 2196
 <211> 168
 <212> PRT
 <213> Homo sapiens

Xaa	Ala	Ser	Pro	Tyr	Ile	Asn	Ala	His	Arg	Asp	Cys	Thr	Phe	Val	Val				
1				5				10					15						
Met	Leu	Pro	Gly	Asp	Gly	Val	Ala	His	Pro	Asn	Phe	Gly	Asn	Ile	Val				
			20					25				30							
His	Asp	Leu	Val	Leu	Leu	His	Ser	Leu	Gly	Val	Arg	Leu	Val	Leu	Val				
			35				40				45								
His	Gly	Ser	Arg	Pro	Gln	Ile	Asp	Ser	Arg	Leu	Glu	Ala	Arg	Gly	Leu				
	50					55				60									
Val	Pro	Tyr	Tyr	His	Lys	Gly	Met	Arg	Val	Thr	Asp	Ala	Ser	Thr	Leu				
65				70				75						80					
Glu	Cys	Val	Ile	Asp	Ala	Val	Gly	Gln	Leu	Arg	Ile	Ala	Ile	Glu	Ala				
				85				90						95					
Arg	Leu	Ser	Met	Asp	Met	Ala	Ser	Ser	Pro	Met	Gln	Gly	Ser	Arg	Leu				

```

                100                105                110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
                115                120                125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
                130                135                140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145                150                155                160
Pro Leu Gly Tyr Ser Pro Thr Gly
                165

```

<210> 2197
 <211> 351
 <212> DNA
 <213> Homo sapiens

```

<400> 2197
acaagtccgt cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgcta gcccggtctg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

<210> 2198
 <211> 117
 <212> PRT
 <213> Homo sapiens

```

<400> 2198
Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
1         5         10         15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
20        25        30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
35        40        45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
50        55        60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65        70        75        80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
85        90        95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
100       105       110
Gly Ile Asp Gln Arg
115

```

<210> 2199
 <211> 457

<212> DNA

<213> Homo sapiens

<400> 2199

```

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca
60
ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa
120
ggcagaagcc cccgccccca cctccgagc tccgttcggg cagagcgctt gcctgcctgc
180
cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
240
atccctttct gcgacgcca ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
300
ggcggcccg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc
360
gtcctgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc
420
aagccactca ctctgctctg gggtaagtcc cgccggc
457

```

<210> 2200

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2200

```

Arg Arg Arg Pro Pro Arg Ser Ala Ser Leu Gly His Ala Lys Thr Leu
1           5           10           15
Gly Lys Ser Ala Gly Ala Arg Glu Lys Gly Trp Lys Glu Gly Thr Gly
20           25           30
Arg Ala Glu Asn Ser Pro Leu Lys Gly Arg Ser Pro Arg Pro His Pro
35           40           45
Pro Ser Ser Val Arg Ala Glu Arg Leu Pro Ala Cys Arg Cys Trp Gly
50           55           60
Arg Pro Pro Arg Pro Ala Met Pro Gly Pro Ala Thr Asp Ala Gly Lys
65           70           75           80
Ile Pro Phe Cys Asp Ala Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser
85           90           95
Ser Glu Gly Gly Gly Gly Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg
100          105          110
Gln Asn Ile Val Trp Arg Asn Val Val Leu Met Ser Leu Leu His Leu
115          120          125
Gly Ala Val Tyr Ser Leu Val Leu Ile Pro Lys Ala Lys Pro Leu Thr
130          135          140
Leu Leu Trp Gly Lys Ser Arg Arg
145          150

```

<210> 2201

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2201

agtactgcga tggacagcta tgtcgtggat ggtggtcgca aattacatgt ttgtggtaac
 60
 aaccctgatt gcgatggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
 120
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
 300
 gattttcttcg tcttacgtga gggcgctgct ggttta
 336

<210> 2202
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 2202
 Ser Thr Ala Met Asp Ser Tyr Val Val Asp Gly Gly Arg Lys Leu His
 1 5 10 15
 Val Cys Gly Asn Asn Pro Asp Cys Asp Gly Tyr Glu Val Glu Glu Gly
 20 25 30
 Glu Phe Lys Ile Lys Gly Tyr Asp Gly Pro Thr Ile Pro Cys Asp Lys
 35 40 45
 Cys Asp Gly Glu Met Gln Leu Lys Thr Gly Arg Phe Gly Pro Tyr Phe
 50 55 60
 Ala Cys Thr Ser Cys Asp Asn Thr Arg Lys Val Leu Lys Ser Gly Gln
 65 70 75 80
 Pro Ala Pro Pro Arg Val Asp Pro Ile Lys Met Glu His Leu Arg Ser
 85 90 95
 Thr Lys His Asp Asp Phe Phe Val Leu Arg Glu Gly Ala Ala Gly Leu
 100 105 110

<210> 2203
 <211> 273
 <212> DNA
 <213> Homo sapiens

<400> 2203
 ctcgagagat gcagtcccag ccgggggtggg aagctgtgca gacagccccg gatctggggac
 60
 gtgatggaaa actcaacaga ctggttcaga tcttggcccc gagcccagag gcaccggggga
 120
 cccccagggc tgtttctccc tggccacacc agtaccacac ttccaaatgc cctgtaggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgtcctgatg gtg
 273

<210> 2204
 <211> 88
 <212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1           5           10           15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
          20           25           30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
          35           40           45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
          50           55           60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65           70           75           80
Ala Ser Leu Arg Cys Pro Asp Gly
          85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

```

gnnnnnnggng nnnnactggg gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgctcctg aagtggacac ctctctctct tccgtcagca aggagccgca ctgcatgggtt
180
gtctttgatc attgcaatga gttttctggt aacatcaccg aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1           5           10           15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
          20           25           30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
          35           40           45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
          50           55           60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65           70           75           80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

				85					90					95					
Pro	Arg	Lys	Asn	Pro	Ala	Leu	Trp	Asp	Leu	Gly	Ile	Ile	Gln	Ala	Lys				
			100					105					110						
Thr	Arg	Ser	Leu	Arg	Asp	Arg	Trp	Ser	Glu	Val	Pro	Arg	Lys	Leu	Glu				
		115					120					125							
Phe																			

<210> 2207
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 2207
 atctccaacc ccgagaccct ctccaatata gccggcttcg agggctacat cgacctgggc
 60
 cgcgagctct ccagcctgca ctactgctc tgggaggccg tcagccagct ggagcagagc
 120
 atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
 180
 accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
 240
 agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg
 300
 atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt ttttgtcaca
 360
 aggtcctccg gggctccagcc ctacactgcc cgcagctcga gttactcgga agccaacgag
 420
 cctgatcttc agatggccaa cgggtggcaag agcctctcca tgggtggacct ccaggacgcc
 480
 cgcacgctgg atggggaggc aggctccccg gcggggcccc acgtcctccc cacagatggg
 540
 caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
 600
 gcagggctgg ccacggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
 660
 ggcgcgc
 667

<210> 2208
 <211> 222
 <212> PRT
 <213> Homo sapiens

<400> 2208
 Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
 1 5 10 15
 Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
 20 25 30
 Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
 35 40 45
 Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
 50 55 60
 Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

<210> 2209
 <211> 353
 <212> DNA
 <213> Homo sapiens

```

<400> 2209
ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaaggggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgttttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

<210> 2210
 <211> 94
 <212> PRT
 <213> Homo sapiens

```

<400> 2210
Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1          5          10          15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
          20          25          30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
          35          40          45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
          50          55          60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

65 70 75
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala
 85 90

```
<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens
```

```

<400> 2211
ctgaccacat ctccgacgat cctagacctc tgttctgcat ctcggaacacc accgactgct
60
cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga
120
aggaaggagg ggaaggggat ggatccatgt actttgggggt tggagaaatg ggggacagca
180
agtctcctca acccaaatac agccccctg ggaggctcct gccccgtctc tgtggatagt
240
gagcccagct gcaagggcgg cctgccaggg acaaaccac caaaaggaaa gatgttgtag
300
aaccaaaagag aggctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc
360
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc
420
atgcgcaaag tcatgcccac caccaagtcc agcagaggcg ccggctggag gcgaccagag
480
ctgtcatccc ggg
493

```

```
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
```

<400> 2212															
Met	Gly	Met	Thr	Leu	Arg	Met	Leu	Ser	Phe	Ser	Glu	Ala	Val	Arg	Val
1				5					10					15	
Arg	Thr	Asp	Leu	Ala	Thr	Ala	Pro	Cys	Pro	Pro	Gly	Ala	Pro	Gly	Leu
			20					25					30		
Gly	Gly	Pro	Gly	Arg	Arg	Leu	Phe	Gln	Gly	Ala	Ser	Leu	Trp	Phe	Tyr
		35					40					45			
Asn	Ile	Phe	Pro	Phe	Gly	Gly	Phe	Val	Pro	Gly	Arg	Pro	Pro	Leu	Gln
	50					55					60				
Leu	Gly	Ser	Leu	Ser	Thr	Glu	Thr	Gly	Gln	Glu	Pro	Pro	Arg	Gly	Ala
65					70					75					80
Val	Phe	Gly	Leu	Arg	Arg	Leu	Ala	Val	Pro	His	Phe	Ser	Asn	Pro	Lys
				85					90					95	
Val	His	Gly	Ser	Ile	Pro	Phe	Pro	Ser	Phe	Leu	Pro	Val	Pro	Val	Ser
			100					105					110		
Gly	Phe	Gly	Asn	Arg	Phe	Pro	Leu	Cys	Ser	Pro	Arg	Val	Gln		
		115					120					125			

<210> 2213
<211> 327

<212> DNA

<213> Homo sapiens

<400> 2213

```
acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt
60
gccggtgctt cgacacactg ggttatatcg ccctcaaagc acaggtctac gaaggttctg
120
acggaaggcc cggccaatcc gatcgcgggc tcggcgctgc gcatcatccg ggcgcgcgtg
180
tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
240
atcgcccggg tggtcgacgc gatcacgtca cgggacgagg aagccgcca gcggtgactg
300
ctcgaccaca atcgcagcgc gttggaa
327
```

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

```
Met Arg Ser Pro Ser Ile Ala Gly Ala Ser Thr His Trp Val Ile Ser
 1           5           10           15
Pro Ser Lys His Arg Ser Thr Lys Val Leu Thr Glu Gly Pro Ala Asn
 20           25           30
Pro Ile Ala Ala Ser Ala Leu Arg Ile Ile Arg Ala Arg Val Ser Gln
 35           40           45
Leu Trp Gly Thr Ser Leu Leu Arg Asn Gly Arg Ala Glu Gln Ser Val
 50           55           60
Val Glu Ile Ala Arg Leu Val Asp Ala Ile Thr Ser Arg Asp Glu Glu
 65           70           75           80
Ala Ala Gln Arg Ala Leu Leu Asp His Asn Arg Ser Ala Leu Glu
      85           90           95
```

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

```
ctggggatca tgcctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgatc
60
ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtagc
120
accggttacc tctctctcgt gcttggcctg ttgcaggcaa cggccttcgt cacgcttgcc
180
acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctcggtcttc
240
gaagtcgtcg tcatgatcct gactatgacg gccggtagca ccatcgtcat gtggatgggt
300
gagctcatca ccgaccgcgg tatcggaac ggtatgtcga tcatgatttt cactcagatt
360
```

gcggcgcggtt tccctgactc gctgtggtct atcaagggtcg ctcgaaatgg cgccggtcag
 420
 gctcacgcgt
 430

<210> 2216
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2216
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
 1 5 10 15
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
 20 25 30
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
 35 40 45
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
 50 55 60
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
 65 70 75 80
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
 85 90 95
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
 100 105 110
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
 115 120 125
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
 130 135 140

<210> 2217
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 2217
 accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct
 60
 atgacgtggc tcgatgacga cgtggggcgcc gacctgttga atcaggctga ttccatggac
 120
 catgccctgg aggccaccgt cccaggtcgg gtcaccacgc cggacgcca agtcatccag
 180
 acctgtgccg tggtgctga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
 240
 gaggactcta ggggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag
 300
 gttttcgaga ccgccgaacg catgggtgggg ctggcgcgcg ccgacgtsgt gtgggtctct
 360
 gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta
 420
 cgagagaatg tctttgctca gtcc
 444

<210> 2218

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2218

```

Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1           5           10           15
Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu
      20           25           30
Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
      35           40           45
Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
      50           55           60
Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
      65           70           75           80
Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
      85           90           95
Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
      100          105          110
Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
      115          120          125
Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
      130          135          140
Phe Ala Gln Ser
145

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<210> 2219
 <211> 688
 <212> DNA
 <213> Homo sapiens

<400> 2219

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120
tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
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660

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688

<210> 2220
<211> 189
<212> PRT
<213> Homo sapiens

<400> 2220
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1 5 10 15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
20 25 30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
35 40 45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
50 55 60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
65 70 75 80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
85 90 95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
100 105 110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
115 120 125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
130 135 140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145 150 155 160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
165 170 175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
180 185

<210> 2221
<211> 530
<212> DNA
<213> Homo sapiens

<400> 2221
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120
ctacaacaac gcctcagtaa aacaaaaacc atcaagcaag gcatgatgca agaactactc
180
acagggaaaa cgagggttggg atgagccaca aggtgaattt agtgcattgag ctggataagc
240
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360
gtaacaaatc ggcttatcgg ctggggacgg tgggttttca ttatcataat gaaccgtag
420

acaacgagaa tacccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt
 480
 tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt
 530

<210> 2222
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 2222
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 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser
 20 25 30
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr
 35 40 45
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr
 50 55 60
 Arg Leu Val
 65

<210> 2223
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 2223
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 tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg
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 cgcgtcctgc gctgatatag gcctggagat gcccctatggc gtgtcgggca acctcgtagt
 240
 tcaggccgtc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac
 300
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 360
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 480
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 482

<210> 2224
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2224
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	20	25	30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu			
	35	40	45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys			
	50	55	60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn			
65	70	75	80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr			
	85	90	95
Asp Ala Gly Leu Thr Thr Ala Ala Ala			
	100	105	

<210> 2225

<211> 753

<212> DNA

<213> Homo sapiens

<400> 2225

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 120
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc
 180
 aaggagggca tcggccacac aggttgggtc gtctcggacg agctcggggc ggtgggcaac
 240
 gaggattatt gcgctgtcat cgcccgatg gaaaacggag tgatgtgcac cctggagtcc
 300
 agtcgggtca gtgttgggccc gcgcgcggag tacatcgtcg agatctatgg aaccgacgga
 360
 tcaatccggt ggaacttcga ggatctcaac catttgacg tctgtctggg gcgaaacaat
 420
 cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt
 480
 ttccaaccgg gagccggaac atccatgggc tttgacgaca tgaaggctgt tgaggctgcg
 540
 aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatgggtgg
 600
 gcctcagcgg aggtcaacga tgcgatcgtt gcctcctgcg ggggaccatg cctggcatga
 660
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 720
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 753

<210> 2226

<211> 219

<212> PRT

<213> Homo sapiens

<400> 2226

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

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			20				25						30					
Leu	Val	Gln	Tyr	Leu	Leu	Lys	Gly	Arg	Phe	Thr	Glu	Val	Ser	Ala	Val			
			35				40						45					
Ser	Glu	Thr	Phe	Ile	Arg	Gln	Arg	Pro	Lys	Pro	Leu	Lys	Glu	Gly	Ile			
			50				55						60					
Gly	His	Thr	Gly	Trp	Val	Val	Ser	Asp	Glu	Leu	Gly	Pro	Val	Gly	Asn			
65				70						75			80					
Glu	Asp	Tyr	Cys	Ala	Val	Ile	Ala	Arg	Met	Glu	Asn	Gly	Val	Met	Cys			
			85						90			95						
Thr	Leu	Glu	Ser	Ser	Arg	Val	Ser	Val	Gly	Pro	Arg	Ala	Glu	Tyr	Ile			
			100						105			110						
Val	Glu	Ile	Tyr	Gly	Thr	Asp	Gly	Ser	Ile	Arg	Trp	Asn	Phe	Glu	Asp			
			115						120			125						
Leu	Asn	His	Leu	Gln	Val	Cys	Leu	Gly	Arg	Asn	Asn	Arg	Ala	Leu	Gln			
			130			135						140						
Gly	Tyr	Val	Asn	Cys	Met	Ala	Gly	Pro	Asp	Phe	Pro	Glu	Phe	Met	Arg			
145				150						155			160					
Phe	Gln	Pro	Gly	Ala	Gly	Thr	Ser	Met	Gly	Phe	Asp	Asp	Met	Lys	Val			
			165						170			175						
Val	Glu	Ala	Ala	Lys	Phe	Val	Arg	Gly	Val	Leu	Asp	Gly	Gln	Gln	Tyr			
			180						185			190						
Gly	Pro	Ser	Val	Ala	Asp	Gly	Trp	Ala	Ser	Ala	Glu	Val	Asn	Asp	Ala			
			195			200						205						
Ile	Val	Ala	Ser	Cys	Gly	Gly	Pro	Cys	Leu	Ala								
			210			215												

```

      1             5             10             15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20             25             30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35             40             45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50             55             60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
65             70             75             80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85             90             95
Glu Ala

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<210> 2229

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2229

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120
tagctcagcc ccttctctgcg tgcttgcccc tgggaggatg ccatccccag tccccctcttc
180
tgggccctgc tctggggact cggcacagat ggatccagtg catcctcagc cccctgagaa
240
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cctcggtccc gccaaactgt
320

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<210> 2230

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2230

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Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
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Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20             25             30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35             40             45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50             55             60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
65             70             75             80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85             90

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<210> 2231

<211> 671

<212> DNA

<213> Homo sapiens

<400> 2231

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aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc
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catttactgt cggggtgaca gggggggtgg gggtcagagt agagacagga gaaggaagtg
240
agcatttgtg ggatacccac cacgtgccag ggactgaacc ctatctggat ctctgcagc
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360
ctataacaga taaacagatg accctgaatg gggcaggtca tgtcatctgc catagataca
420
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480
acatgcagac actggcaggg ctgggggtgt tccccatcgg tgatagcctg gtgcccccat
540
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671

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<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

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Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
1           5           10           15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20          25          30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35          40          45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50          55          60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65          70          75          80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85          90          95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100         105         110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115         120         125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130         135         140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

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145		150		155		160								
Gly	Asp	Ile	Phe	Ser	His	Gln	Leu	Ser	Phe	Tyr	Ser	Phe	Leu	Asp
				165				170					175	
Thr														

<210> 2233

<211> 6199

<212> DNA

<213> Homo sapiens

<400> 2233

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120
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240
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1260

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5340
ctcatctcca tcaagaggct gaccttgacg cagaaggcca aggtgaagtt ggactttgtg
5400
gccccagcca ctggtgcccc caactacact ctgtacttca tgagtgcgc ttacatggga
5460
tgtgaccagg agtacaaatt cagcgtggat gtgaaagaag ctgagacaga cagtgttca
5520
gattgagtcc tgaggcattt acttttgggt aaaggagagt tgagcctgaa ttaggaatgt
5580
gtacattgta ggaatcctgg ttgtggggac caggtctgtg gccctcaggt ctggccagcc
5640
agggtggtg ctgtccccgc ctacctccac ttcctttccc ttgctcactc tggatccagt
5700
gacagcaggt gtcattgggtc aagcataaat catatatagc attttcaggc atgttcctgg
5760
tagttctttt gagtctgaca ttctaataaa ataatttgta gaaaccattt gtctttgtag
5820
tgattccaaa ttaaaagttt tctttctcca acctgagggc acggccaaaa agatctggtt
5880
attttttagc caggaacgtg cttgttaatg agtatgtctg gaggacagac ctgctcatta
5940
ggtgtgctgt cccctgtagc ctctgtagtc agcccagagg aggttacatg cgactgtggc
6000
ctggcctcag tggtagccac acatcagcac taccacaaga accaactg agcctcgga
6060
gctagatcac aggttagggg tttctctaga tgggggttct gaaatttgca gtgtctgctc
6120

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 6180
 taaacaggtt ttctaattcc
 6199

<210> 2234
 <211> 1701
 <212> PRT
 <213> Homo sapiens

<400> 2234
 Arg Arg Gln Arg Lys Gly Tyr Glu Glu Val His Val Pro Ala Leu Lys
 1 5 10 15
 Pro Lys Pro Phe Gly Ser Glu Glu Gln Leu Leu Pro Val Glu Lys Leu
 20 25 30
 Pro Lys Tyr Ala Gln Ala Gly Phe Glu Gly Phe Lys Thr Leu Asn Arg
 35 40 45
 Ile Gln Ser Lys Leu Tyr Arg Ala Ala Leu Glu Thr Asp Glu Asn Leu
 50 55 60
 Leu Leu Cys Ala Pro Thr Gly Ala Gly Lys Thr Asn Val Ala Leu Met
 65 70 75 80
 Cys Met Leu Arg Glu Ile Gly Lys His Ile Asn Met Asp Gly Thr Ile
 85 90 95
 Asn Val Asp Asp Phe Lys Ile Ile Tyr Ile Ala Pro Met Arg Ser Leu
 100 105 110
 Val Gln Glu Met Val Gly Ser Phe Gly Lys Arg Leu Ala Thr Tyr Gly
 115 120 125
 Ile Thr Val Ala Glu Leu Thr Gly Asp His Gln Leu Cys Lys Glu Glu
 130 135 140
 Ile Ser Ala Thr Gln Ile Ile Val Cys Thr Pro Glu Lys Trp Asp Ile
 145 150 155 160
 Ile Thr Arg Lys Gly Gly Glu Arg Thr Tyr Thr Gln Leu Val Arg Leu
 165 170 175
 Ile Val Leu Asp Glu Ile His Leu Leu His Asp Asp Arg Gly Pro Val
 180 185 190
 Leu Glu Ala Leu Val Ala Arg Ala Ile Arg Asn Ile Glu Met Thr Gln
 195 200 205
 Glu Asp Val Arg Leu Ile Gly Leu Ser Ala Thr Leu Pro Asn Tyr Glu
 210 215 220
 Asp Val Ala Thr Phe Leu Arg Val Asp Pro Ala Lys Gly Leu Phe Tyr
 225 230 235 240
 Phe Asp Asn Ser Phe Arg Pro Val Pro Leu Glu Gln Thr Tyr Val Gly
 245 250 255
 Ile Thr Glu Lys Lys Ala Ile Lys Arg Phe Gln Ile Met Asn Glu Ile
 260 265 270
 Val Tyr Glu Lys Ile Met Glu His Ala Gly Lys Asn Gln Val Leu Val
 275 280 285
 Phe Val His Ser Arg Lys Glu Thr Gly Lys Thr Ala Arg Ala Ile Arg
 290 295 300
 Asp Met Cys Leu Glu Lys Asp Thr Leu Gly Leu Phe Leu Arg Glu Gly
 305 310 315 320
 Ser Ala Ser Thr Glu Val Leu Arg Thr Glu Ala Glu Gln Cys Lys Asn
 325 330 335
 Leu Glu Leu Lys Asp Leu Leu Pro Tyr Gly Phe Ala Ile His His Ala

				340				345					350		
Gly	Met	Thr	Arg	Val	Asp	Arg	Thr	Leu	Val	Glu	Asp	Leu	Phe	Ala	Asp
		355					360					365			
Lys	His	Ile	Gln	Val	Leu	Val	Ser	Thr	Ala	Thr	Leu	Ala	Trp	Gly	Val
	370					375					380				
Asn	Leu	Pro	Ala	His	Thr	Val	Ile	Ile	Lys	Gly	Thr	Gln	Val	Tyr	Ser
385					390					395					400
Pro	Glu	Lys	Gly	Arg	Trp	Thr	Glu	Leu	Gly	Ala	Leu	Asp	Ile	Leu	Gln
				405					410					415	
Met	Leu	Gly	Arg	Ala	Gly	Arg	Pro	Gln	Tyr	Asp	Thr	Lys	Gly	Glu	Gly
			420				425					430			
Ile	Leu	Ile	Thr	Ser	His	Gly	Glu	Leu	Gln	Tyr	Tyr	Leu	Ser	Leu	Leu
		435					440					445			
Asn	Gln	Gln	Leu	Pro	Ile	Glu	Ser	Gln	Met	Val	Ser	Lys	Leu	Pro	Asp
	450					455					460				
Met	Leu	Asn	Ala	Glu	Ile	Val	Leu	Gly	Asn	Val	Gln	Asn	Ala	Lys	Asp
465					470					475					480
Ala	Val	Asn	Trp	Leu	Gly	Tyr	Ala	Tyr	Leu	Tyr	Ile	Arg	Met	Leu	Arg
				485					490					495	
Ser	Pro	Thr	Leu	Tyr	Gly	Ile	Ser	His	Asp	Asp	Leu	Lys	Gly	Asp	Pro
			500					505					510		
Leu	Leu	Asp	Gln	Arg	Arg	Leu	Asp	Leu	Val	His	Thr	Ala	Ala	Leu	Met
		515					520					525			
Leu	Asp	Lys	Asn	Asn	Leu	Val	Lys	Tyr	Asp	Lys	Lys	Thr	Gly	Asn	Phe
	530					535					540				
Gln	Val	Thr	Glu	Leu	Gly	Arg	Ile	Ala	Ser	His	Tyr	Tyr	Ile	Thr	Asn
545					550					555					560
Asp	Thr	Val	Gln	Thr	Tyr	Asn	Gln	Leu	Leu	Lys	Pro	Thr	Leu	Ser	Glu
				565					570					575	
Ile	Glu	Leu	Phe	Arg	Val	Phe	Ser	Leu	Ser	Ser	Glu	Phe	Lys	Asn	Ile
			580				585						590		
Thr	Val	Arg	Glu	Glu	Glu	Lys	Leu	Glu	Leu	Gln	Lys	Leu	Leu	Glu	Arg
		595					600					605			
Val	Pro	Ile	Pro	Val	Lys	Glu	Ser	Ile	Glu	Glu	Pro	Ser	Ala	Lys	Ile
	610					615					620				
Asn	Val	Leu	Leu	Gln	Ala	Phe	Ile	Ser	Gln	Leu	Lys	Leu	Glu	Gly	Phe
625					630					635					640
Ala	Leu	Met	Ala	Asp	Met	Val	Tyr	Val	Thr	Gln	Ser	Ala	Gly	Arg	Leu
				645					650					655	
Met	Arg	Ala	Ile	Phe	Glu	Ile	Val	Leu	Asn	Arg	Gly	Trp	Ala	Gln	Leu
			660					665					670		
Thr	Asp	Lys	Thr	Leu	Asn	Leu	Cys	Lys	Met	Ile	Asp	Lys	Arg	Met	Trp
		675					680					685			
Gln	Ser	Met	Cys	Pro	Leu	Arg	Gln	Phe	Arg	Lys	Leu	Pro	Glu	Glu	Val
	</														

770		775		780
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His				
785		790		795
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu				800
	805		810	
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe				815
	820		825	
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro				830
	835		840	
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr				845
	850		855	
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser				860
865		870		875
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile				880
	885		890	
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe				895
	900		905	
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala				910
	915		920	
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile				925
	930		935	
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu				940
945		950		955
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu				960
	965		970	
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser				975
	980		985	
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys				990
	995		1000	
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile				1005
	1010		1015	
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg				1020
1025		1030		1035
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser				1040
	1045		1050	
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser				1055
	1060		1065	
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu				1070
	1075		1080	
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu				1085
	1090		1095	
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro				1100
1105		1110		1115
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu				1120
	1125		1130	
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln				1135
	1140		1145	
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys				1150
	1155		1160	
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr				1165
	1170		1175	
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu				1180
1185		1190		1195
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys				1200

1646

1635 1640 1645
 Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
 1650 1655 1660
 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
 1665 1670 1675 1680
 Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
 1685 1690 1695
 Asp Ser Asp Ser Asp
 1700

<210> 2235
 <211> 586
 <212> DNA
 <213> Homo sapiens

<400> 2235
 tctagaatga gtatgaggac actctcacca gagtgaggtg aagggtgtata cagctggcac
 60
 tcagtgttg cacattctcc actggcagaa tgactcccga cgtggctcgg gctccccgga
 120
 agacaccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga
 180
 ctcattgttg cctctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga
 240
 agcccttcga cggcagcacc ggcccccggc cctgcttccc ctctaccggg cacctgacga
 300
 ggatgaagcc ggggaacgct gtagccgct agagccacc ccgcgagcac tttggacaaa
 360
 ggatcttggc caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga
 420
 tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc
 480
 tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccct gccatctcca
 540
 ccctggcccg ctctgccatc ttctctgtga cctaccctc acgcgt
 586

<210> 2236
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 2236
 Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
 1 5 10 15
 Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
 20 25 30
 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
 35 40 45
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
 50 55 60
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
 65 70 75 80
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

				85					90					95					
Gly	Pro	His	Leu	Leu	Gly	Pro	Pro	Ala	Leu	Ala	Glu	Arg	Ala	Thr	Met				
			100					105						110					
Ser	Gln	Leu	Pro	Gly	Ser	Ser	Gly	Arg	Arg	Cys									
			115				120												

<210> 2237
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 2237
 cctaggaagg cacacctgtg tcccactgca gccaaagagga agcaccctct
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 tggggcgag gagtgctggc cagcttgggg atagtccttg gaagtggctg ggagcactga
 120
 gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt
 180
 gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
 240
 caccctgag aaggagtctt gttgggagca ggggtggggaa gcactgtggg agaggtgtcc
 300
 ttggctcggg tagcagggac cttgatgtat cttgaagcca gggggccgac tgaggcgctt
 360
 gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta
 420
 t
 421

<210> 2238
 <211> 124
 <212> PRT
 <213> Homo sapiens

Met	Glu	Ala	Phe	Arg	Gln	Ala	Pro	Gln	Ser	Ala	Pro	Trp	Leu	Gln	Asp				
1				5					10					15					
Thr	Ser	Arg	Ser	Leu	Leu	Pro	Glu	Pro	Arg	Thr	Pro	Leu	Pro	Gln	Cys				
			20					25					30						
Phe	Pro	Thr	Leu	Leu	Pro	Thr	Arg	Leu	Leu	Leu	Thr	Gly	Gly	Leu	Ala				
			35				40					45							
Gln	Leu	Glu	Pro	Ile	Val	Gln	Gln	Val	Leu	Ala	Glu	Glu	Pro	Leu	Ala				
			50			55					60								
Pro	His	Cys	Pro	Thr	Pro	Asp	Gln	Gly	Asp	Ala	Leu	Glu	Glu	Gly	Leu				
65				70					75					80					
Asp	Leu	Ser	Ser	Ser	Leu	Ser	Ala	Pro	Asp	His	Phe	Gln	Gly	Leu	Ser				
			85					90					95						
Pro	Ser	Trp	Pro	Ala	Leu	Leu	Arg	Pro	Lys	Arg	Ser	Val	Trp	Gly	Ala				
			100					105					110						
Ser	Ser	Trp	Leu	Gln	Trp	Asp	Thr	Gly	Val	Pro	Ser								
			115				120												

<210> 2239
 <211> 623

<212> DNA

<213> Homo sapiens

<400> 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct
 60
 agccattcca ggcttgggcc catggtcacc ccacacaata aggctaagag tccaggtgtc
 120
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga
 180
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct
 240
 gagcgtatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca
 300
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgacct
 360
 atcagtgggt cagttagttc tgcaagaccc ttgggcagct ctcgtggccc tggccggcct
 420
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc ggggcggtct
 480
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat
 540
 tcagtcccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt
 600
 cccactataa agcctaagtg cac
 623

<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

Ala	Ser	Arg	Thr	Gln	Lys	Ser	Ala	Val	Glu	His	Lys	Ala	Lys	Lys	Ser
1				5					10					15	
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
			20					25					30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35					40					45			
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50					55					60				
Ser	Gly	Pro	Val	Pro	Arg	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro
65					70				75					80	
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85						90					95	
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105					110		
Ser	Ser	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ser	Ala
		115				120					125				
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
		130				135					140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145					150					155				160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg

				165				170				175			
Thr	Val	Ser	Asn	Ser	Val	Pro	Gly	Arg	Pro	Val	Ser	Ser	Leu	Gly	Pro
180				185				190							
Gly	Gln	Thr	Val	Ser	Ser	Ser	Gly	Pro	Thr	Ile	Lys	Pro	Lys	Cys	
195				200				205							

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<210> 2241
<211> 656
<212> DNA
<213> Homo sapiens
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<400> 2241
nnacgcgtga agggcagcag caacaccacg gagtgtgttc ccgtgcccac ctccgagcac
60
gtggccgaga tcgtgggcag gcaaggctgc aagattaagg ccttgagggc caagaccaac
120
acctacatta gaaccccggg aaggggagcag gaaccagtgt tcatgggtgac agggcgacgg
180
gaggacgtgg ccacagcccg gcgggaaatc atctcagcag cggagcactt ctccatgata
240
cgtgcctccc gcaacaagtc aggcgcgcgc tttggtgtgg ctctgtctct gcccggccag
300
gtgaccatcc gtgtgcgggt gccctaccgc gtggtggggc tgggtggtggg ccccaaaggg
360
gcaaccatca agcgcatacca gcagcaaacc aacacataca ttatcacacc aagccgtgac
420
cgcgaccccg tgttcgagat cacgggtgcc ccaggcaacg tggagcgtgc gcgcgaggag
480
atcgagacgc acatcgcggt gcgcactggc aagatcctcg agtacaacaa tgaaaacgac
540
ttcctggcgg ggagccccga cgcagcaatc gatagccgct actccgacgc ctggcggggtg
600
caccagcccc gctgcaagcc cctctccacc ttccggcaga acagcctggg ctgcag
656

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<210> 2242
<211> 218
<212> PRT
<213> Homo sapiens
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<400> 2242																
Xaa	Arg	Val	Lys	Gly	Ser	Ser	Asn	Thr	Thr	Glu	Cys	Val	Pro	Val	Pro	
1				5					10					15		
Thr	Ser	Glu	His	Val	Ala	Glu	Ile	Val	Gly	Arg	Gln	Gly	Cys	Lys	Ile	
			20					25					30			
Lys	Ala	Leu	Arg	Ala	Lys	Thr	Asn	Thr	Tyr	Ile	Arg	Thr	Pro	Gly	Arg	
		35					40					45				
Gly	Glu	Glu	Pro	Val	Phe	Met	Val	Thr	Gly	Arg	Arg	Glu	Asp	Val	Ala	
	50					55					60					
Thr	Ala	Arg	Arg	Glu	Ile	Ile	Ser	Ala	Ala	Glu	His	Phe	Ser	Met	Ile	
65				70						75				80		
Arg	Ala	Ser	Arg	Asn	Lys	Ser	Gly	Ala	Ala	Phe	Gly	Val	Ala	Pro	Ala	
				85					90					95		
Leu	Pro	Gly	Gln	Val	Thr	Ile	Arg	Val	Arg	Val	Pro	Tyr	Arg	Val	Val	

```

          100          105          110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
          115          120          125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
          130          135          140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145          150          155          160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
          165          170          175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
          180          185          190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
          195          200          205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
          210          215

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<210> 2243
 <211> 384
 <212> DNA
 <213> Homo sapiens

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<400> 2243
gaattcagca tttaaagtgc actcggtggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggttaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccttaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtccctggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgccctccc tgtgctcgcc tgtcttggtt
360
tacctcccat cctgggccct tgga
384

```

<210> 2244
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 2244
Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1          5          10          15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
          20          25          30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
          35          40          45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
          50          55          60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65          70          75          80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

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85 90 95
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
 100 105

<210> 2245
 <211> 632
 <212> DNA
 <213> Homo sapiens

<400> 2245
 acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct
 60
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgtatt
 120
 gaggcccaca agcatttcac gtggcgctcat ggcgaggctg acgcggtggg catggtgttt
 180
 gcggccgaac tgtcgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgc
 240
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggagatctg
 300
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagt
 360
 ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga ccctgacgag
 420
 gccgctttag ccgagtgcta cgaccggtgt tccgcacggt aaaaacgttc ggaaatgaac
 480
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgacc caagtgatgt
 540
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccataccga
 600
 cttaagttca gtatcgacgg catgaatccg ga
 632

<210> 2246
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2246
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
 1 5 10 15
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
 20 25 30
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
 35 40 45
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
 50 55 60
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
 65 70 75 80
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
 85 90 95
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
 100 105 110
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115 120 125
 Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
 130 135 140
 Glu Cys Tyr Asp Arg Cys Ser Ala Arg
 145 150

<210> 2247
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 2247
 gggcggttcgc ctccagggtt ctccccgaca ctggatgcc aacctgccag gggcagaagg
 60
 gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg
 120
 cctcttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctgggcg
 180
 cccccaccgc tgaccacccc gatctcagct ctgcctttcc cgctctctctg ctgggttgca
 240
 taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa
 300
 tgtgccgtgt gagccatccc cctg
 324

<210> 2248
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2248
 Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
 1 5 10 15
 Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
 20 25 30
 Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
 35 40 45
 Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
 50 55 60
 Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
 65 70 75 80
 Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
 85 90 95
 Val Gly Glu Asn Pro Gly Gly Glu Arg
 100 105

<210> 2249
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 2249
 gaaaaccgga taacaggggtg tatacaagcc tctgagttct gggagcaaca accagctcaa
 60

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggttttc ccattcccac
 120
 ggtggaaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa
 180
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcgggt tagcacccctc
 240
 ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggctgggag gaactgggag
 300
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg
 360
 gccacatggg gacaggcctc ctgggggcag atct
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1				5					10					15	
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
			20					25					30		
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35					40					45			
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55				60					
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
65					70					75				80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
				85					90					95	
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
				100											

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca
 60
 gtggaatagt cagggttaaatt ttaatgtgac cgtttatcgc aatctgccga ccaactcgca
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgagggt ataacgccga agcggtaaaa
 180
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg
 240
 agtttaaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag
 300
 ctggtttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct
 360
 acatcgtcaa cgttatattt tgatagtttg acgggttaatg ctggtaatgg tggttttctt
 420

cattgcattc agatggatac atctgtcaac gccgctaac aggttggttc tgttggtgct
 480
 gatattgctt ttgatgccga ccctaaattt ttgacctgtt tggttcgctt tgagtcctct
 540
 tcggttccga ctacctccc gactgcctat gatgtttatc ctttggaagg tcgccatgat
 600
 ggtgggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg
 654

<210> 2252
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 2252
 Met Phe Gln Thr Phe Ile Ser Arg His Asn Ser Asn Phe Phe Ser Asp
 1 5 10 15
 Lys Leu Val Leu Thr Ser Val Thr Pro Ala Ser Ser Ala Pro Val Leu
 20 25 30
 Gln Thr Pro Lys Ala Thr Ser Ser Thr Leu Tyr Phe Asp Ser Leu Thr
 35 40 45
 Val Asn Ala Gly Asn Gly Gly Phe Leu His Cys Ile Gln Met Asp Thr
 50 55 60
 Ser Val Asn Ala Ala Asn Gln Val Val Ser Val Gly Ala Asp Ile Ala
 65 70 75 80
 Phe Asp Ala Asp Pro Lys Phe Phe Ala Cys Leu Val Arg Phe Glu Ser
 85 90 95
 Ser Ser Val Pro Thr Thr Leu Pro Thr Ala Tyr Asp Val Tyr Pro Leu
 100 105 110
 Asp Gly Arg His Asp Gly Gly Tyr Tyr Thr Val Lys Asp Cys Val Thr
 115 120 125
 Ile Asp Val Leu Pro Arg Thr
 130 135

<210> 2253
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2253
 ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgcgc attattcgcg
 60
 cactgagcac cagcaagcag gcccgctgg attgccacc gggtcacgaa aacgatgaaa
 120
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 180
 agcgccgcca cgccgaggac cgctcaccg aatacctggg ccaactggaa gatatcgctt
 240
 ccgcacgcac cctggagctc aaggccagca accaagcgtt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttgg
 327

<210> 2254

<211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2254
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1 5 10 15
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
 20 25 30
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
 35 40 45
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
 50 55 60
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
 65 70 75 80
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
 85 90 95
 Leu Thr Ala Leu
 100

<210> 2255
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 2255
 nngctagcac atgagaagtg tgaagtttat actttgcttg ggcatcacg ccgttttcca
 60
 aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct
 120
 cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
 180
 actcgtctta aggagcttgg ttggacgcta ctcttgagg tgcatgatga agtgatactg
 240
 gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagt catgtctaag
 300
 cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgcaa gtgtgca
 357

<210> 2256
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 2256
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1 5 10 15
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
 20 25 30
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
 35 40 45
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
 50 55 60
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu


```

65              70              75              80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
              85              90              95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
              100              105              110
Ala Val Asp Ala Lys Cys Ala
              115

```

<210> 2257
 <211> 626
 <212> DNA
 <213> Homo sapiens

```

<400> 2257
nnaatgacaa aaaatatgaa caaaatagtgacagtgaggca gtacaaataa ctataaaagc
60
ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa
120
gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca
180
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agagggtgaa
240
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggt
300
actactgttg gcaatgatga tgatggacta aatcagcaga ttctaggaa ggaaaatgaa
360
gagcatgaca ggctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata
420
tactctgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt
480
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
540
tataaaggta ggaccactgc ataaatgcaa ggccttttga tgtatcctgc agtaatgtgt
600
gtatacattg ctgagaactg acgcgt
626

```

<210> 2258
 <211> 187
 <212> PRT
 <213> Homo sapiens

```

<400> 2258
Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
1              5              10              15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
20              25              30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
35              40              45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
50              55              60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
65              70              75              80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

85							90						95		
Leu	Thr	Asp	Gly	Thr	Thr	Val	Gly	Asn	Asp	Asp	Asp	Gly	Leu	Asn	Gln
100							105						110		
Gln	Ile	Pro	Arg	Lys	Glu	Asn	Glu	Glu	His	Asp	Arg	Pro	Ala	Asp	Lys
115							120						125		
Thr	Ala	Asn	Glu	Lys	Asn	Lys	Val	Lys	Asn	Gln	Ile	Tyr	Pro	Glu	Ala
130							135						140		
Asp	Phe	Ala	Asp	Ser	Met	Glu	Pro	Ser	Glu	Ile	Ala	Ser	Glu	Asp	Cys
145							150						155		
Glu	Leu	Ser	His	Ser	Val	Tyr	Glu	Asn	Phe	Met	Leu	Leu	Ile	Glu	Gln
165							170						175		
Leu	Arg	Met	Glu	Tyr	Lys	Gly	Arg	Thr	Thr	Ala					
180							185								

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<210> 2259
<211> 425
<212> DNA
<213> Homo sapiens
```

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<400> 2259
acgcgtcaca atgataaagc cattatatc atcaagaggt aaatcattct tgaaattttc
60
taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120
acggtcattc acgactgtaa cacgacagcc aataaacaat agcaaatacag taatagctcg
180
gctaacatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
240
acactccatt tcgcctacca tgcatagaga attcagcttt gctttatcta cagtaaattc
300
ttcaatagga gttccgtata gaacccttcc atcttcagca taaatagtct tatccccttg
360
acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt
420
catga
425

```

```
<210> 2260
<211> 141
<212> PRT
<213> Homo sapiens
```

<400> 2260															
Met	Lys	Asn	Arg	Leu	Gln	Val	Thr	Glu	Ala	Thr	Val	Met	Val	Thr	Val
1				5					10					15	
Leu	Ser	Gly	Pro	Arg	Gln	Gly	Asp	Lys	Thr	Ile	Tyr	Ala	Glu	Asp	Gly
			20					25					30		
Arg	Val	Leu	Tyr	Gly	Thr	Pro	Ile	Glu	Gly	Phe	Thr	Val	Asp	Lys	Ala
		35					40					45			
Lys	Leu	Asn	Ser	Leu	Cys	Met	Val	Gly	Glu	Met	Glu	Cys	Phe	Val	Gln
	50					55					60				
Pro	Val	Glu	Asn	Asp	Pro	Ser	Val	Leu	Val	Leu	Gly	Ala	Gly	His	Val
65					70					75				80	
Ser	Arg	Ala	Ile	Thr	Asp	Leu	Leu	Leu	Phe	Ile	Gly	Cys	Arg	Val	Thr

<400> 2262															
Met	Pro	Gly	Gly	Ser	Ser	Thr	Ser	Phe	Thr	Glu	Arg	Cys	Ser	Ile	Gly
1				5					10					15	
Pro	Asn	Gly	Cys	Pro	Cys	Gly	Gln	Pro	Leu	Tyr	Leu	Val	Met	Gly	Arg
			20					25					30		
Asn	Pro	Met	Ser	Ser	Arg	Asn	Gly	Phe	Gln	Ala	Thr	Asp	Leu	Ala	Leu
		35					40					45			
Ile	Ala	Val	Phe	Ala	Ala	Leu	Ile	Ala	Val	Leu	Ala	Val	Ile	Pro	Pro
	50					55					60				
Met	Phe	Met	Val	Gly	Ala	Val	Pro	Phe	Ala	Leu	Gln	Met	Val	Ala	Val
65					70					75					80
Met	Leu	Ala	Pro	Met	Val	Leu	Gly	Ser	Ile	Arg	Gly	Gly	Cys	Ala	Val

				85					90					95			
Gly	Leu	Tyr	Ile	Leu	Val	Gly	Ala	Leu	Gly	Leu	Pro	Val	Phe	Ser	Gly		
			100					105					110				
Gly	Ser	Ser	Gly	Ile	Gly	Val	Leu	Val	Gly	Pro	Thr	Gly	Gly	Tyr	Leu		
		115					120					125					
Trp	Gly	Trp	Leu	Ile	Gly	Ala	Phe	Val	Ala	Gly							
	130						135										

<210> 2263

<211> 491

<212> DNA

<213> Homo sapiens

<400> 2263

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naccggttcc cggctcgaccg aggcaaaggc aaaagtaagc aggggtgcccg tagtccccgt
60
tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg
120
gagggcaccc ggtctcgcac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
180
gctatttcac gtgggggttcc ggttatcccg attgcttttag taggagcatg ggcggctatg
240
ccgtccgagc aagccagggt accaaaagga cgtccattgg tccacgtggc tattggacac
300
cctatggacc ctgttccccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag
360
gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac
420
ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcac caccaaccac
480
tcgacgtgca c
491

```

<210> 2264

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2264

Xaa	Ala	Phe	Pro	Val	Asp	Arg	Gly	Lys	Gly	Lys	Ser	Lys	Gln	Gly	Ala		
1				5					10				15				
Arg	Ser	Pro	Arg	Ser	His	Arg	Gly	Met	Ala	Gly	Ser	Leu	Leu	Thr	Asp		
		20					25					30					
Gly	Val	Pro	Leu	Leu	Ile	Phe	Pro	Glu	Gly	Thr	Arg	Ser	Arg	Thr	Gly		
	35					40					45						
Ala	Met	Gly	Thr	Phe	Lys	Pro	Gly	Ala	Ala	Ala	Leu	Ala	Ile	Ser	Arg		
	50				55					60							
Gly	Val	Pro	Val	Ile	Pro	Ile	Ala	Leu	Val	Gly	Ala	Trp	Ala	Ala	Met		
65				70					75				80				
Pro	Ser	Glu	Gln	Ala	Arg	Leu	Pro	Lys	Gly	Arg	Pro	Leu	Val	His	Val		
		85					90					95					
Ala	Ile	Gly	His	Pro	Met	Asp	Pro	Val	Pro	Gly	Glu	Ile	Ala	His	Gln		
	100					105					110						
Phe	Ser	Glu	Arg	Ile	Arg	Arg	Gln	Val	Ile	Glu	Leu	His	Asp	Gln	Thr		

```

      115              120              125
Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
      130              135              140
Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
145              150              155              160
Ser Thr Cys

```

<210> 2265
 <211> 328
 <212> DNA
 <213> Homo sapiens

```

<400> 2265
ccatgggaat aggccaacac ggatggatct actgtataac ttgcctgcca tcaggaaaga
60
gtcaacacgg cagacacatg ctggcagaaa ccctgctgga gttgcccctg agcattgatg
120
cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
180
cggaagggct cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
240
tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
300
tttagcacgt gactgggacc actggaca
328

```

<210> 2266
 <211> 100
 <212> PRT
 <213> Homo sapiens

```

<400> 2266
Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro
1      5      10      15
Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
20     25     30
Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
35     40     45
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
50     55     60
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
65     70     75     80
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
85     90     95
Thr Pro Asn Leu
100

```

<210> 2267
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 2267

agatctatgc aggtagcgct ggtctccggg gggtaagttg tccactccct gtcagatggc
 60
 agaccatgga gggctaatagc aggctgggaa ggctaggcag agttcccaga aacaggtcac
 120
 cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac
 180
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg
 240
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaccctg accttgaagg
 300
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggattgc agagatgggc
 360
 gtcaacgcgt
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5				10						15	
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
	20						25					30			
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
	35					40					45				
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65				70				75						80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
				85				90							

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

ctctccgacc gcgtcaaccc cggcaatata cgcaagttcg acgaccagat cgaatcgatt
 60
 tgtaaggctg ccaccgagca cggtacgagc atccgaatcg gcgtgaatgc tgggtctctc
 120
 gacaaacgtc tgcttgacaa atacggagcc cggaccgccg aggctatggt ggagtcggca
 180
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag
 240
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgcaa atgcgattat
 300
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg
 360
 gtggccttcg ggcattctct tgccgagggt atcggcgata ccatacgcg ctccttgctg
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
 480
 cctcgaggtc tagagatcgt ctctgc
 507

<210> 2270
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2270
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln
 1 5 10 15
 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg
 20 25 30
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
 35 40 45
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
 50 55 60
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
 65 70 75 80
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
 85 90 95
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
 100 105 110
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
 115 120 125
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
 130 135 140
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
 145 150 155 160
 Pro Arg Gly Leu Glu Ile Val Ser Cys
 165

<210> 2271
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 2271
 nncgccgacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc
 60
 ccgatggtcg acgaaagcct ggaacagttc gccagttgc tcaaaaccgg cacctcggaa
 120
 gaaggcatgg cgcggttgac ctcggaacgc gtggcgcggt tggccactta cagcgacgg
 180
 ctggcggacc accaagggcg tgtgtccgcg cgcattggcg acttggtcca actggtcagc
 240
 gaggcggact ttatccgcc cctggcgggc gacgagatga ctgatgcgg ccatatcgaa
 300
 cgggcgctca agccaaggc cagcgtacc gggcgtgtat cggcgcggt tctcgacgac
 360
 atgctcgtg gggtcactct gatcgacacc gccgggtgcg ccgtgggcaa atgcaacggg
 420

ctgacggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggtat ttccgccacg
 480
 gtgtacccgg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg
 540
 atccactcca agggcgtgat gatccttacc ggt
 573

<210> 2272
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 2272
 Xaa Ala Asp Pro Asp Phe Gln Glu Met Leu Arg Ala Leu Val Asp Phe
 1 5 10 15
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 Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser
 65 70 75 80
 Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala
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 Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg
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 Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile
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 Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu
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 Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr
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<210> 2273
 <211> 4355
 <212> DNA
 <213> Homo sapiens

<400> 2273
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<210> 2274

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

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Gln	Arg	Ser	Cys	Arg	Gly	Gly	Leu	Ser	Leu	Glu	Arg	Leu	Pro	Asn	Ser
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Ile	Ala	Ser	Arg	Phe	Arg	Leu	Thr	Glu	Arg	Glu	Glu	Glu	Val	Ile	Thr
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Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
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Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
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Pro	Leu	Asp	Tyr	Glu	Leu	Thr	Tyr	Phe	Leu	Glu	Ala	Ala	Leu	Gln	Ser
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Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
			100					105					110		
Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
			115				120					125			
Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
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150

155

<210> 2275

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2275

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<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

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			20					25				30			
Pro	Thr	Ala	Met	Thr	Pro	Pro	Val	Leu	Thr	Thr	Ala	Glu	Thr	Ser	Val
			35				40					45			
Lys	Pro	Ser	Val	Ser	Ala	Phe	Thr	His	Ser	Pro	Pro	Glu	Asn	Thr	Thr
			50			55					60				
Gly	Ile	Ser	Ser	Thr	Ile	Ser	Phe	His	Ser	Arg	Thr	Leu	Asn	Leu	Thr
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Asp	Val	Ile	Glu	Glu	Leu	Ala	Gln	Ala	Ser	Thr	Gln	Thr	Leu	Lys	Ser
				85					90					95	
Thr	Ile	Ala	Ser	Glu	Thr	Thr	Leu	Ser	Lys	Ser	His	Gln	Ser	Thr	
			100					105				110			
Thr	Thr	Arg	Lys	Ala	Ile	Ile	Arg	His	Ser	Thr	Ile	Pro	Pro	Phe	Leu
			115				120					125			
Ser	Ser	Ser	Ala	Thr	Leu	Ile	Pro	Val	Pro	Ile	Ser	Pro	Pro	Phe	Thr

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<210> 2277
 <211> 640
 <212> DNA
 <213> Homo sapiens

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<210> 2278
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2278
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 Cys Cys Pro Pro Trp Leu Ser Ser Pro Pro Ala Ala Cys Leu Pro Ser
 35 40 45
 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
 50 55 60
 His Ala Thr Pro Gln Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr
 65 70 75 80
 Leu Ser Ala Pro Thr Leu Pro Pro His Gln Ile Leu Ser Thr Pro
 85 90 95

<210> 2279
 <211> 331
 <212> DNA
 <213> Homo sapiens

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<210> 2280
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2280
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 20 25 30
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 35 40 45
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
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<210> 2281
 <211> 409
 <212> DNA
 <213> Homo sapiens

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 360
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<210> 2282
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2282
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 20 25 30
 Pro Ser Glu Asp Ser Arg Gly Thr Phe Val Pro Asp Ile Leu His Gly
 35 40 45
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp
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 Asp Ile Leu Thr His Cys Glu His Asp Tyr Gly Glu Thr Thr Thr Arg
 85 90 95

<210> 2283
 <211> 404
 <212> DNA
 <213> Homo sapiens

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<210> 2284
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2284
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Val	Leu	Arg	Asn	Arg	Leu	Gln	Pro	Cys	His	Arg	Ser	Ser	Gln	Leu	His
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Gln	Ala	Phe	Gly	Arg	Ala	Val	Ile	Arg	Leu	Pro	Ala	Lys	Ala	Gln	Ala
			85					90					95		
Ser	His	Ala	Thr	Ser	Ser	Pro	Lys	Met	Arg	Lys	Val	Arg	Thr	Arg	Lys
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Gln	Gly	Ala	Val	Glu	Arg	Ser	Ser	Ala	Pro						
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<210> 2285

<211> 6505

<212> DNA

<213> Homo sapiens

<400> 2285

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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
		35				40					45				
Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
	50				55						60				
Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
65				70					75					80	
Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
			85					90					95		
Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
	100							105					110		
Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
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Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
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Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
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Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
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Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
	180					185						190			
Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

1677

625					630					635				640
Glu Tyr Phe Ala Lys	Lys Leu Arg Asp	Ala Val Val Asp	Gly Thr Pro											
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Cys Tyr Gln Val Arg	Ala Ser Arg Asp	Leu Cys Ile Asn	Gly Ile Cys											
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Lys Asn Val Gly Cys	Asp Phe Glu Ile	Asp Ser Gly Ala	Met Glu Asp											
	675				680								685	
Arg Cys Gly Val Cys	His Gly Asn Gly	Ser Thr Cys His	Thr Val Ser											
	690				695								700	
Gly Thr Phe Xaa Arg	Arg Pro Arg Val	Xaa Gly Tyr Val	Asp Val Gly											
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Leu Ile Pro Ala Gly	Ala Arg Glu Ile	Arg Ile Gln Glu	Val Ala Glu											
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Ala Ala Asn Phe Leu	Ala Leu Arg Ser	Glu Asp Pro Glu	Lys Tyr Phe											
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Leu Asn Gly Gly Trp	Thr Ile Gln Trp	Asn Gly Asp Tyr	Gln Val Ala											
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Gly Thr Thr Phe Thr	Tyr Ala Arg Arg	Gly Asn Trp Glu	Asn Leu Thr											
	770				775								780	
Ser Pro Gly Pro Thr	Lys Glu Pro Val	Trp Ile Gln Val	Pro Ala Ser											
785		790			795									800
Arg Gly Pro Gly Gly	Gly Ser Arg Gly	Gly Val Pro Arg	Pro Ser Thr											
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Leu His Gly Arg Ser	Arg Pro Gly Gly	Val Ser Pro Gly	Ser Val Thr											
	820				825								830	
Glu Pro Gly Ser Glu	Pro Gly Pro Pro	Ala Ala Ala Ser	Thr Ser Val											
	835				840								845	
Ser Pro Ser Leu Lys	Trp Pro Asn Leu	Val Ala Ala Val	His Arg Gly											
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Gly Trp Gly Gln Ala	Pro Leu Gly Leu	Gly Gly Trp Arg	Arg His Leu											
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Val Leu Met Gly Pro	Arg Leu Pro Thr	Gln Leu Leu Phe	Gln Glu Ser											
	885				890									895
Asn Pro Gly Val His	Tyr Glu Tyr Thr	Ile His Arg Glu	Ala Gly Gly											
	900				905								910	
His Asp Glu Val Pro	Pro Pro Val Phe	Ser Trp His Tyr	Gly Pro Trp											
	915				920								925	
Thr Lys Cys Thr Val	Thr Cys Gly Arg	Gly Val Gln Arg	Gln Asn Val											
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Tyr Cys Leu Glu Arg	Gln Ala Gly Pro	Val Asp Glu Glu	His Cys Asp											
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Pro Leu Gly Arg Pro	Asp Asp Gln Gln	Arg Lys Cys Ser	Glu Gln Pro											
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Cys Pro Ala Arg Trp	Trp Ala Gly Glu	Trp Gln Leu Cys	Ser Ser Ser											
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Cys Gly Pro Gly Gly	Leu Ser Arg Arg	Ala Val Leu Cys	Ile Arg Ser											
	995				1000								1005	
Val Gly Leu Asp Glu	Gln Ser Ala Leu	Glu Pro Pro Ala	Cys Glu His											
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Pro Ala Thr Trp Ala	Val Gly Asn Trp	Ser Gln Cys Ser	Val Thr Cys											
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Gly Glu Gly Thr Gln	Arg Arg Asn Val	Leu Cys Thr Asn	Asp Thr Gly											

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Val Pro Cys Asp Glu Ala Gln Gln Pro Ala Ser Glu Val Thr Cys Ser		
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Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser		
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Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
1105	1110	1115
Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
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Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu		
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Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile		
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Asn Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu		
1170	1175	1180
Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro His Ser His Pro		
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Ala Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala		
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Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro		
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Ser Gln Ala Gly Arg Ser Pro Pro Pro Ser Glu Gln Thr Pro Gly		
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Asn Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala		
1250	1255	1260
Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
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Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val		
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Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro		
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Val Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro		
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Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp		
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Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr		
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Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
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 Gly His Gln Arg Val Ala Arg Arg
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<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

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<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

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Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu	
	35						40				45				
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
	50					55					60				
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65				70					75					80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85					90					95		
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
	100						105					110			
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
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<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

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<210> 2290
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2290
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 20 25 30
 Ile Asp Tyr Thr Gly Gly Leu Lys His Gln Ile Leu Gln Ser His Gly
 35 40 45
 Gln Asp Ala Glu Leu Ser Gly Thr Leu Ser Leu Val Leu Thr Gln Gly
 50 55 60
 Cys Lys Arg Ile Xaa Arg Gly Tyr Trp Phe Lys Asn Trp Pro Pro Thr
 65 70 75 80
 Thr Lys Thr Ser Thr Ala Val Phe Leu Gly Leu Glu Lys Pro Leu Met
 85 90 95
 Arg Ile His Phe
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<210> 2291
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 2291
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573

<210> 2292
<211> 140
<212> PRT
<213> Homo sapiens

<400> 2292
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Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
35 40 45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
50 55 60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
65 70 75 80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
85 90 95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
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Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
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Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
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<210> 2293
<211> 358
<212> DNA
<213> Homo sapiens

<400> 2293
acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgcccattg
60
gtgaacactg tcgctaagaa ctgggtgaac cggctcaaca cgccggatat gaaaccact
120
gaggagatca agcggcagtt ccaaggctctg cattgggttg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tgggcccacgc tcatggccgg gtcctctttc
240
gaggcgaatc cgcgcatata gagcaacttt gattccgagg gcgctgttgt ggatccggat
300
tccgattcac ttgctggggc tgatcgagat gcccgaggtg cttcggatgc atgccttc
358

<210> 2294
<211> 115
<212> PRT
<213> Homo sapiens

<400> 2294
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

```

      1             5             10             15
Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20             25             30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35             40             45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50             55             60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65             70             75             80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85             90             95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100             105             110
Ala Cys Leu
      115

```

<210> 2295
 <211> 546
 <212> DNA
 <213> Homo sapiens

```

<400> 2295
ggcaccgatc cgagtgggtgg tgccggggatt aggnccggatc tanaaacatt ctccgccctt
60
ggggcgctatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgctgcag
120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcggagcgc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg cggaggcgg cggcgctgct ggatgcgcct
420
catgcccgtg ccgagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

<210> 2296
 <211> 182
 <212> PRT
 <213> Homo sapiens

```

<400> 2296
Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
1             5             10             15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
20             25             30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```

```

          35          40          45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
  50          55          60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
  65          70          75          80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
          85          90          95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
          100          105          110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
          115          120          125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
          130          135          140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
  145          150          155          160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
          165          170          175
Asp Trp Leu Phe Thr Arg
          180

```

<210> 2297
 <211> 414
 <212> DNA
 <213> Homo sapiens

```

<400> 2297
gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaaagg
  60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac cccccccccc
  120
caccccccca aaggccgaaa agcagggcca aaaccccccg gacccccccc gggggggggca
  180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgagggtct ctgggtaata
  240
aatgttgaga tgtagggtta ggtgagatta aacaggttct ttttttcattg atttctcgga
  300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
  360
gatctgaccc acatgtaaag tctgatttct ttggtctggg gcaggcctga aatn
  414

```

<210> 2298
 <211> 67
 <212> PRT
 <213> Homo sapiens

```

<400> 2298
Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
  1          5          10          15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
          20          25          30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
          35          40          45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50
Val Glu Met
65

55

60

<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
ngagatgtct aagttatattt ttttttcccg gaaggcaaatt ggctggcgtg gaagcacaac
60
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctcgtgacca
120
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
180
agtttgata tgactgaggc tctccaatgg gccagatatc actggcgacg gctgatcaga
240
gggtgaacca gggatgatga ttcagggcca tacaactatt cctcgttget cgctgtggg
300
cgcaagtcc ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
360
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
420
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
480
gctgccaat tatatttct gttcctagtt gtcctgaact gggtagcctt ggtagaagcc
540
ttccaaaagg aaatcaccat gttgcctctg gtgggtgggcc ttacaattat cgcaattaaa
600
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa ttttaataact
660
aaagtttata gtaggaaaga gaaaaatac attgaccgat gctggaaaga cgttactggt
720
ggggacttta ttcgcctctc ctgcaacgag gtcacccctg cagacatggt actactcttt
780
tccactgac cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
840
ttaaacaga ggcaggtggg tcggggatat gcagaacagg actctgaagt tgatcctgag
900
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggc
960
ttcctagaac attccaacaa agaacgc
987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
1 5 10 15
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

```
<210> 2301
<211> 390
<212> DNA
<213> Homo sapiens
```

<210> 2302

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2302

```

Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1           5           10           15
Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
          20           25           30
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
          35           40           45
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
          50           55           60
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
65           70           75           80
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
          85           90           95
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
          100          105          110
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
          115          120          125
Gly Arg
          130

```

<210> 2303

<211> 638

<212> DNA

<213> Homo sapiens

<400> 2303

```

nnggateccag gctgcccctg tgtgtctcct tcagtcttcg ttagctgcct gctgctgtct
60
gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggg
120
atcttgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
180
ctcttcttcc tgtcccgggg catcgagggc actggctcgg ccagctactc caccatcgcg
240
cccaccgtcc tgggcgacct ctctgtgagg gaccagcgca cccgcgtgct ggctgtcttc
300
tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggtcggc tgtgacgatg
360
ctgactggga actggcgctg ggcctccga gtcatgcctt gcctggaggc cgtggccttg
420
atcctgctta tcctgctggt tccagaccca ccccggggag ctgccgagac acagggggag
480
ggggccgtgg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
540
tggagttttg tgtggctgac cctcggagtg accgccatgg cctttgtgac tggagccctg
600
gggttctggg cccccaagtt tctgctcgag gcacgcgt
638

```

<210> 2304

<211> 212
 <212> PRT
 <213> Homo sapiens

<400> 2304
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
 1 5 10 15
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
 20 25 30
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
 35 40 45
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
 50 55 60
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
 65 70 75 80
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
 85 90 95
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
 100 105 110
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
 115 120 125
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
 130 135 140
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
 145 150 155 160
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
 165 170 175
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
 180 185 190
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
 195 200 205
 Leu Glu Ala Arg
 210

<210> 2305
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 2305
 gccccgcct ctatcttccg gcatcgtcac agtcgcatcg tgacgggtact ggctggagtc
 60
 tcggaccagc acactttgac cgtcgtggtc gcctcgtgac atggggtaac gcgaacctcg
 120
 tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
 180
 cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca
 240
 cggcgtcggt gcgcgacgag ggcgatgagt tggtcgtcgt tactcgcagc gctgctgccg
 300
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc
 340

<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306
 Met Glu Leu Arg Ala Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1 5 10 15
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
 20 25 30
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
 35 40 45
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
 50 55 60
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
 65 70 75 80
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
 85 90 95
 Asp Asp Ala Gly Arg
 100

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307
 ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa
 60
 gccaaaggcac tgggtggggc tggcagtggg agcaagggtc cagcaggtgg cggaagcaag
 120
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
 180
 gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
 240
 ccaccctgtc ctctccacgg tggctccga ggccttcca ctttccttcc tgagccccca
 300
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca
 360

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1 5 10 15
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
 20 25 30
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
 35 40 45
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
 50 55 60
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro

```

65              70              75              80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
              85              90              95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
              100              105              110
Gly Leu Pro Lys Thr Lys Glu Ala
              115              120

```

<210> 2309
 <211> 395
 <212> DNA
 <213> Homo sapiens

```

<400> 2309
ggatccctac aaatggggcc ctgctctgag cacattccca tgagggctgc ctgccctgtg
60
cactctctgc cctggggccgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttccag caggcacagg gattcctcat gggggaggca gagcccaccc gtctgtcctc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccttgg agtctcctcc cagaccacgc
300
gactccactc aactgtgcc tagcggactg tgtggttgat gcagccggct cacttgagtg
360
tgttgtgtta tgcccacaac aggcttgccg tcacc
395

```

<210> 2310
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1              5              10              15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
              20              25              30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
              35              40              45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
              50              55              60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65              70              75              80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
              85              90              95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
              100              105

```

<210> 2311
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2311

gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
 60
 ggcttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgctct cgccgcgggc
 120
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
 180
 gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg
 240
 gccaacattc gacagaacat cgcgatcgcg atcggggctaa aggcgggtgtt ccttgtaacg
 300
 accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
 360
 cttgtgacca tgaacgcg
 378

<210> 2312

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2312

Val	His	Ala	Glu	Met	Leu	Pro	Gln	Asp	Lys	Gln	Arg	Val	Val	Gly	Glu
1				5					10					15	
Leu	Lys	Arg	Gln	Gly	Phe	Ser	Val	Ile	Lys	Val	Gly	Asp	Gly	Ile	Asn
			20					25					30		
Asp	Cys	Asp	Ala	Leu	Ala	Ala	Ala	Asp	Val	Gly	Ser	Pro	Met	Gly	Gly
		35					40					45			
Ser	Ala	Asp	Val	Ala	Leu	Glu	Thr	Ala	Asp	Ala	Ala	Val	Leu	His	Gly
	50					55					60				
Arg	Val	Gly	Asp	Val	Phe	Ala	Met	Ile	Ala	Leu	Ser	Lys	Arg	Thr	Met
65					70					75				80	
Ala	Asn	Ile	Arg	Gln	Asn	Ile	Ala	Ile	Ala	Ile	Gly	Leu	Lys	Ala	Val
				85					90					95	
Phe	Leu	Val	Thr	Thr	Val	Val	Gly	Ile	Thr	Gly	Leu	Trp	Pro	Ala	Ile
		100					105						110		
Leu	Ala	Asp	Thr	Gly	Thr	Thr	Glu	Leu	Val	Thr	Met	Asn	Ala		
		115					120					125			

<210> 2313

<211> 669

<212> DNA

<213> Homo sapiens

<400> 2313

ctagtggcat ggtctcgtcg gtcttttagtg gagcataccg acacatcggg gactcaaacg
 60
 atccgaatca tggctcgtcc tggttggcct ggaaccatta acgtacgcct caccatcgc
 120
 ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcggtag gacagcgggg
 180
 ccgcttgat acgcagcaca ccctatctc tgtctgggtg gcaccatcga cgactggaca
 240

gtcgacgccc cgttttacctc gtgggttacag gtcgatgata ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtgaaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt
 420
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
 480
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca
 540
 tttaatgagg gcccgaccca cggtagcgtc attcgactgg agcccggtaa tgacgtcaca
 600
 ctgcactggg gcatcgcta acccgcgga gctcgaaagg acaaggacgg gaaggcagga
 660
 ttcacgcgt
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1				5					10					15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
		20						25					30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35					40					45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50					55					60				
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65					70					75					80
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
				85					90					95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
			100					105						110	
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115					120						125		
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
		130				135					140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145					150					155					160
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165						170					175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185						190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
		195					200						205		

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315
 nacgcgtccc tcatcgatac cgagcccggg atgggaaaac ggggtgatcg cgttgaggcc
 60
 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcgctg
 120
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
 180
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat
 240
 gttgaggtcg aggggtgcccc gaccggtatt cagcaggctg tcagggtggaa ccttttccag
 300
 attgctcagg catcagcccc tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg
 360
 tcaggctatg aaggccacta cttttgggac actgagggtt atgtcatccc gatgttgacc
 420
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ctttccgcaa
 480
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccgtg gcgaacaatc
 540
 accggt
 546

<210> 2316
 <211> 182
 <212> PRT
 <213> Homo sapiens

<400> 2316
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr
 1 5 10 15
 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val
 20 25 30
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg
 35 40 45
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr
 50 55 60
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp
 65 70 75 80
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp
 85 90 95
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly
 100 105 110
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe
 115 120 125
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro
 130 135 140
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln
 145 150 155 160
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro
 165 170 175
 Trp Arg Thr Ile Thr Gly
 180

<210> 2317
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 2317
 gccggcgggc tcgggaacgg tcaactgacct gcagcaggca atggcggtcg cggtttaatc
 60
 agggttctgc acggagtttt ggatagtcgg tccagtcgcc actggcaagg cgcgaccagg
 120
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc
 180
 gggtcagttc gatcagcgcg gtcgttcgag cgcttcctga acgcagcccc tgctggcgca
 240
 gacgtcggct gagggggcct ggtgtgagat gcaaccccg attcctgccg gaaagagcc
 300
 atccctcggg tcgggtgtctc gatgtgtcag cgagctcggc gatcgcatc cagaggacct
 360
 cgggcagttc gattggctcg gctccgatgg tgagcttccc cggtcgtgat gtcacgtcga
 420
 cctgctcacg ggtgagcgcg acgatgcgag tgaggtggag gccgtagagg agcacgagca
 480
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 496

<210> 2318
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2318
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
 1 5 10 15
 Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp
 20 25 30
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
 35 40 45
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
 50 55 60
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
 65 70 75 80
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
 85 90 95
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
 100 105

<210> 2319
 <211> 1748
 <212> DNA
 <213> Homo sapiens

<400> 2319
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gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaact
120
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt
180
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta
240
atggaagggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta
300
aaaatatttc tctaccatga tgggcttggt cgaatgggta cagagaagta cattccacct
360
aatgagtcca atttgacca gttatacatg catctgacaa actactccgt gaacaagcat
420
aatgagcatt ttgaacggga tgaaactgag aacaaaggca gcaaacgttc catcaaagg
480
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca
540
gaattgggtg taaagaccct gattgtagca gaacctcatg tcctgcatgc ctatcgaatg
600
tgtagacctg gtcaacctcc aggaagcgaa agtgtctgct ttgaagtcct gggatttgat
660
atthttgttg atagaaaact aaagccatgg cttctggaga ttaaccgagc cccaagcttt
720
ggaactgata agaaaataga ctatgatgta aaaaggggag tgctgctaaa tgcgttgaag
780
ctactaaaca taaggaccag tgacaaaaga agaaacttgg ccaaacaaaa agctgaggct
840
caaaggaggc tctatggtca aaattcaatt aaaaggctct taccaggctc ctgagactgg
900
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgctcaa
960
gtacgaaagc agatctcacg agaagaacat gaaaatcgac atatggggaa ttatagacga
1020
atthtacttc ctgaagataa agcattactt gaaaagtatg aaaatttggt agctgttgcc
1080
tttcagacct tcctttcagg aagagcagct tcattccagc gagagttgaa taatcctttg
1140
aaaaggatga aggaagaaga tattttggat cttctggagc aatgtgaaat tgatgatgaa
1200
aagttgatgg gaaaaactac caagactcga ggaccaaagc ctctgtgttc tatgcctgag
1260
agtactgaga taatgaaaag accaaagtac tgcagcagtg acagcagtta tgatagtagc
1320
agcagctctt cagaatctga cgaaaatgaa aaagaagagt accaaaataa gaaaagagaa
1380
aagcaagtta catataatct taaacctcc aaccactaca aattaattca acaaccagc
1440
tcataagac gttcagtcag ctgcctcgg tccatctctg ctcaatcacc ttccagtggg
1500
gacaccgcc cattttctgc tcaacaaatg atatctgtgt cagggccaac ttctgcatct
1560
cggtcacatt ccttaaacc gggccttct cctacatgag gcatctgcct cacagtaatg
1620
atgcctgctc taccaactct caagtgagt agtctttgag gcaactgaaa acaaagaac
1680

aagaagatga tctaacaagt cagaccttat ttgttctcaa agacatgaag atccggtttc

1740

caggaaag

1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

Xaa	Ile	Lys	Ser	Arg	Ser	Leu	Asp	Tyr	Thr	Phe	Val	Pro	Arg	Thr	Trp
1			5						10					15	
Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35					40				45				
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55				60					
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65					70					75					80
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
				85					90					95	
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
		115					120						125		
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130					135					140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145					150					155					160
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
				165					170					175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
			180					185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
		195					200					205			
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210					215					220				
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225					230					235					240
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
				245					250					255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260						265					270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
		275					280					285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290					295					300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305					310					315					320
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
				325					330					335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

[illegible]

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<210> 2321
<211> 433
<212> DNA
<213> Homo sapiens
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<400> 2321
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cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaattgcat
120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtccaggac accatcacag agcagtactt cccttggtgag atactctcag ctaagtaaga
240
attgagtgag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgcgt
300
cagggttagc agcattttcta gaccttgatg gtaaaaatgat gttctcaacc tttgctttca
360
gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
420
cagagggtgga gtg
433

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<210> 2322
<211> 105
<212> PRT
<213> Homo sapiens
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<400> 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1           5           10           15
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
          20           25           30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
          35           40           45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
          50           55           60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65           70           75           80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
          85           90           95
Thr His Ile Asp Thr Ser Thr Gln Leu
          100          105

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<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

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acgcgtcaaa actggcaaaag ctggcggcctt aggggggaggg gcaagtggac ttggaggccc
60
tcctccactg tgcaccccct tggaaaaaaaa gcgaggagggg catcaagtaa aagtttcttg
120
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
180
ctgccgggca cagcgncttc caggagccag ccgggggagag ctgagccaag gccgaaggag
240
ccgcctgcgg gcttagccgc cccctcccgc ccgttgggcc cagagcggac gctgggacgc
300
ccgggggtctg gcagctctgc gcccggctag gagcggggcgg gcgagcatta gcctgcgtcc
360
tgagagaagg ggcagcgcgc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
420
ctgtcagtga gcgcccggat tgcacggccc ccgggtagtg cctgccggcg aggggcggga
480
gctcgggtga cttggccatc cccatccccg gccccaggccc ggagggcggc cg
532

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<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

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Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1           5           10           15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
          20           25           30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
          35           40           45
Pro Arg Thr

```

50

<210> 2325

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2325

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nnacgcgtgc aggaccgcat gagcgccatc tgggagagag gagtgggttg aggaaagatg
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gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat
120
ccccgcaagg gccgcattat tcccggagcc gatgctgatg tgggtggtgtg ggacccagaa
180
gccacaaaga ccatctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag
240
aacatgcgtc gccacggcgt gccactggtc accatcagcc gggggcgcgt cgtgtatgag
300
aacggcgtct tcatgtgcgc cgagggcacc ggcaagttct gtcccctgag gtccttccca
360
gacactgtct acaagaagct ggtccagaga gagaagactt taaaggttag aggagtggcc
420
cgcactccct acctggggga tgtcgctggt gtcgtgcac
459

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<210> 2326

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2326

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Xaa Arg Val Gln Asp Arg Met Ser Ala Ile Trp Glu Arg Gly Val Val
1      5      10      15
Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn
20     25     30
Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro
35     40     45
Gly Ala Asp Ala Asp Val Val Trp Asp Pro Glu Ala Thr Lys Thr
50     55     60
Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu
65     70     75     80
Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg
85     90     95
Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys
100    105    110
Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val
115    120    125
Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr
130    135    140
Leu Gly Asp Val Ala Val Val His
145    150

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<210> 2327

<211> 599

<212> DNA

<213> Homo sapiens

<400> 2327

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gaattccaga agatcaagta ttcctacgat gccctggaga agaagcagtt tctccccgtg
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gccttttcctg tgggaaacgc cttctcatac tatcagagca acagaggcct ccaggaagac
120
tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtggtgcct
180
gactttctcgg agcttttcaa ggagagagcc acagccccct tctttgtatt tcagggtgttc
240
tgtgtggggc tctggtgcct ggatgagtac tgggtactaca gcgtctttac gctatccatg
300
ctggtggcgt tcgaggcctc gctggtgcag cagcagatgc ggaacatgtc ggagatccgg
360
aagatgggca acaagcccca catgatccag gtctaccgaa gccgcaagtg gaggccatt
420
gccagtgatg agatcgtacc aggggacatc gtctccatcg gtgaggccgg gttccgctca
480
gtcccagtgg gagccccagc ctcagggcct ctggccaacc ctctgcctc tgccctgcag
540
gccgctcccc acaggagaac ctggtgccat gtgacgtgct tctgctgcga ggccgctgc
599

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<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

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Glu Phe Gln Lys Ile Lys Tyr Ser Tyr Asp Ala Leu Glu Lys Lys Gln
1           5           10           15
Phe Leu Pro Val Ala Phe Pro Val Gly Asn Ala Phe Ser Tyr Tyr Gln
20           25           30
Ser Asn Arg Gly Phe Gln Glu Asp Ser Glu Ile Arg Ala Ala Glu Lys
35           40           45
Lys Phe Gly Ser Asn Lys Ala Glu Met Val Val Pro Asp Phe Ser Glu
50           55           60
Leu Phe Lys Glu Arg Ala Thr Ala Pro Phe Phe Val Phe Gln Val Phe
65           70           75           80
Cys Val Gly Leu Trp Cys Leu Asp Glu Tyr Trp Tyr Tyr Ser Val Phe
85           90           95
Thr Leu Ser Met Leu Val Ala Phe Glu Ala Ser Leu Val Gln Gln Gln
100          105          110
Met Arg Asn Met Ser Glu Ile Arg Lys Met Gly Asn Lys Pro His Met
115          120          125
Ile Gln Val Tyr Arg Ser Arg Lys Trp Arg Pro Ile Ala Ser Asp Glu
130          135          140
Ile Val Pro Gly Asp Ile Val Ser Ile Gly Glu Ala Gly Phe Arg Ser
145          150          155          160
Val Pro Val Gly Ala Pro Ala Ser Gly Pro Leu Ala Asn Pro Pro Ala
165          170          175
Ser Ala Leu Gln Ala Ala Pro His Arg Arg Thr Trp Cys His Val Thr

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180 185 190
 Cys Phe Cys Cys Glu Ala Ala
 195

<210> 2329
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 2329
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 60
 tgggtgtccaa agccacgcac tagctgatcg gggagaaccg tcaccctcta ggctcgtgtc
 120
 atgagcacgc aaccactga ggaaccactc cgactagttg tggcattcaa tccagtgcct
 180
 agtgcctccc gggttgctca tcatcatgcg acgagatttc gcctggcggt gcaggccttc
 240
 attgtcgtcg tcattgggtgg tttgttgtgg gcgttgacgg ccgacgcctt ccagttatcg
 300
 acggtgatgt ggatgctcgg ggcattgggtg gtgctattcc tcgtgctttt cgtcatccag
 360
 aatctgcggc tgcacgccgc tcgcaaggat cc
 392

<210> 2330
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 2330
 Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe
 1 5 10 15
 Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg
 20 25 30
 Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
 35 40 45
 Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
 50 55 60
 Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
 65 70 75 80
 Asn Leu Arg Leu His Ala Ala Arg Lys Asp
 85 90

<210> 2331
 <211> 2813
 <212> DNA
 <213> Homo sapiens

<400> 2331
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 60
 gatttaagggt gcccgagtcc acgctgatgg actgccgtag acaactgaaa gacagtaagc
 120

aaatTTtAtc tAttAcAAag aActTTtAAag tTgAgAAtat tGgAcCtCtT cCtAtAActg
180
tTtCgTcTcT gAAaAtTAat gGgTAtAAct gCcAagGtTA tGgAttCgAg gTgCtGgAtt
240
gGgAttCagT tTcccTgGa cccAAacAcA tcccGcgAtA tCagCattGt gTtCactCCA
300
gActTTtAcCt cCtCctGggT aAttCgGgAc cTaagTcTtG tAaccGcAgC gGacCtagAA
360
tTtCgCtTcA cTcTcAatGt gActCtCcCt cAtCacCtGt tGccCtTgTg tGcAgAcGtG
420
gTtCcAgGgAc cCagCtGgGa gGagTcAtTt tGgAgGcTcA cGgTcTtCtT tGtCagTtTg
480
tCcCtGtTgG gTgTgAtTtT aAtAgCctTc cAacAagcAc agTacAttCt cAtGgAattC
540
atGaaaAcAA gAcAgaggCa aaAtGctAgC tCctCtTcAc agCAaaAcAA tGgtCcAtG
600
gatGtAatCa gCccCcatTc tTAcAAAAgC aAtTgCAagA actTtCtCgA tAcAtatGgC
660
cCctCtGAtA aaggCagggG gaAgAactGc cTtCcagTgA aCactCccCA aAgCaggatC
720
cAgAatGctG cAAagaggAg cccAgccAcC tAtGgtCatt cTcAgAagAA gCacAAatGc
780
tCagtGtatt aCagTaaAcA cAAaaccAgC aCagCtGcgG cCagCagcAc cAgcAcgAct
840
actGaggAAA aAcAgactTc accCctGggC agCtCactGc cTgCtGctAA agaggacAtt
900
tGcactGatG cCatGcGtGa gaActggatC agCctCagat atGCAagtGg cAtAAatGtC
960
aAcCtGcAgA agAattTtAc cTtCccAAA aActTactGa atAAagAagA aaAcAcactG
1020
AAAAAcAA tTgtTtTcAg tAatCctTcT tCagAatGtA gTatGaaggA gGgAAtAcAg
1080
aCatGtattG tTcCtAaggA aActGacAtt aAAactTcAg agAacAcAgC tGagTtCAag
1140
gaAcGggAgC tCtGtCcAct gaAgacCtCc aAgAAactAc cTgAAaAcCA tTtAcCAagA
1200
aActCacCtC agTaccAcCA gCcAgactTg cCagAAattT cCaggAAAA tAatGggAat
1260
aAccAgCAag tAcCtGtCAa gaAtGaagTA gatCattGtG aAAattTgAA gaaggTggAc
1320
aCAaagCctT cTtCagAAAA gaAgattCac aAAacatCtA gAgAagAcAt gTtTtCtGag
1380
aaAcaggAcA tAcCtTtCgt agAgCAagAA gatCctTtAta gGaagAAAA gCtTcaggAg
1440
aaaAgagAag gAAattTtAcA aaattTtAAat tGgagTAAAA gTcGAacatG tAgAAagAac
1500
aAgAAAaggG gTgtTgCtCc agTctCAagg cCtCctGAac agAgTgatCt aaAgCtTgTg
1560
tGcagtGact tTgagaggTc tGagCtGagC agTgacatCa atGtAagAag cTggtGtAtA
1620
caggAAagCA cTagggaggT tTgtAAagCA gatGccGaaa tTgCAagcAg tTtAcCtGct
1680
gCccAgagAg agGcaggTtA cTaccAgAag cCtGagAagA aAtGtGtGgA cAagTtCtGc
1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag cgggggcagc
 1800
 tgggggagct ggagcagcac cagcagctcc gacggggata agaagcccat ggtggacgcc
 1860
 cagcacttcc tgccggccgg agacagtgtt tcacaaaatg attttccttc tgaagctccc
 1920
 atctccttga atctttctca taacatctgc aatcccatga ccgtgaatag tctcccacaa
 1980
 tacgcagagc ctctctgtcc cagccttctt gccggggcca caggtgttga agaagataaa
 2040
 ggtctttact cacctggaga cctgtggccc actccgccag tgtgtgtgac aagcagctta
 2100
 aactgcaccc tggagaacgg cgtgccttgt gtgattcagg agtcggcccc ggttcataat
 2160
 agtttcattg attggagtgc aacatgcgaa ggccagtttt ccagcgcata ctgtccattg
 2220
 gaattgaacg attacaatgc ctttcagaa gaaaacatga actatgcaa tggtttcccc
 2280
 tgtcctgcag atgttcagac agactttatt gatcacaact ctcagtctac ctggaacacc
 2340
 ccaccaaca tgctgtctgc ctggggacat gccagtttca tcagctctcc gccctacctc
 2400
 acaagcacc gaagcttgtc tccaatgtct ggactttttg gttccatctg ggccccgcaa
 2460
 agcgatgtgt atgaaaattg ctgccccatc aacccacca cggaacattc gaccacatg
 2520
 gaaaaccaag cggctgtgtg caaggaatac taccgggggt tcaaccggtt tcgcgccat
 2580
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga
 2640
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag
 2700
 aggcttgtgt tttgattact agtgtaaact gggtattgag atagattatg acattggtgg
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 2813

<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

Pro	Asp	Phe	Thr	Ser	Ser	Trp	Val	Ile	Arg	Asp	Leu	Ser	Leu	Val	Thr
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			20					25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
		35					40					45			
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
	50					55					60				
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65					70					75				80	
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln

				85					90				95				
Asn	Asn	Gly	Pro	Met	Asp	Val	Ile	Ser	Pro	His	Ser	Tyr	Lys	Ser	Asn		
			100					105					110				
Cys	Lys	Asn	Phe	Leu	Asp	Thr	Tyr	Gly	Pro	Ser	Asp	Lys	Gly	Arg	Gly		
		115					120					125					
Lys	Asn	Cys	Leu	Pro	Val	Asn	Thr	Pro	Gln	Ser	Arg	Ile	Gln	Asn	Ala		
		130				135					140						
Ala	Lys	Arg	Ser	Pro	Ala	Thr	Tyr	Gly	His	Ser	Gln	Lys	Lys	His	Lys		
145					150					155					160		
Cys	Ser	Val	Tyr	Tyr	Ser	Lys	His	Lys	Thr	Ser	Thr	Ala	Ala	Ala	Ser		
			165					170						175			
Ser	Thr	Ser	Thr	Thr	Thr	Glu	Glu	Lys	Gln	Thr	Ser	Pro	Leu	Gly	Ser		
		180						185					190				
Ser	Leu	Pro	Ala	Ala	Lys	Glu	Asp	Ile	Cys	Thr	Asp	Ala	Met	Arg	Glu		
		195				200						205					
Asn	Trp	Ile	Ser	Leu	Arg	Tyr	Ala	Ser	Gly	Ile	Asn	Val	Asn	Leu	Gln		
	210					215					220						
Lys	Asn	Leu	Thr	Leu	Pro	Lys	Asn	Leu	Leu	Asn	Lys	Glu	Glu	Asn	Thr		
225					230					235					240		
Leu	Lys	Asn	Thr	Ile	Val	Phe	Ser	Asn	Pro	Ser	Ser	Glu	Cys	Ser	Met		
		245						250						255			
Lys	Glu	Gly	Ile	Gln	Thr	Cys	Met	Phe	Pro	Lys	Glu	Thr	Asp	Ile	Lys		
		260						265					270				
Thr	Ser	Glu	Asn	Thr	Ala	Glu	Phe	Lys	Glu	Arg	Glu	Leu	Cys	Pro	Leu		
	275						280					285					
Lys	Thr	Ser	Lys	Lys	Leu	Pro	Glu	Asn	His	Leu	Pro	Arg	Asn	Ser	Pro		
	290				295						300						
Gln	Tyr	His	Gln	Pro	Asp	Leu	Pro	Glu	Ile	Ser	Arg	Lys	Asn	Asn	Gly		
305					310					315					320		
Asn	Asn	Gln	Gln	Val	Pro	Val	Lys	Asn	Glu	Val	Asp	His	Cys	Glu	Asn		
		325						330						335			
Leu	Lys	Lys	Val	Asp	Thr	Lys	Pro	Ser	Ser	Glu	Lys	Lys	Ile	His	Lys		
		340						345					350				
Thr	Ser	Arg	Glu	Asp	Met	Phe	Ser	Glu	Lys	Gln	Asp	Ile	Pro	Phe	Val		
	355				360							365					
Glu	Gln	Glu	Asp	Pro	Tyr	Arg	Lys	Lys	Lys	Leu	Gln	Glu	Lys	Arg	Glu		
	370				375					380							
Gly	Asn	Leu	Gln	Asn	Leu	Asn	Trp	Ser	Lys	Ser	Arg	Thr	Cys	Arg	Lys		
385				390					395						400		
Asn	Lys	Lys	Arg	Gly	Val	Ala	Pro	Val	Ser	Arg	Pro	Pro	Glu	Gln	Ser		
		405						410					415				
Asp	Leu	Lys	Leu	Val	Cys	Ser	Asp	Phe	Glu	Arg	Ser	Glu	Leu	Ser	Ser		
		420						425					430				
Asp	Ile	Asn	Val	Arg	Ser	Trp	Cys	Ile	Gln	Glu	Ser	Thr	Arg	Glu	Val		
	435					440						445					
Cys	Lys	Ala	Asp	Ala	Glu	Ile	Ala	Ser	Ser	Leu	Pro	Ala	Ala	Gln	Arg		
	450				455					460							
Glu	Ala	Gly	Tyr	Tyr	Gln	Lys	Pro	Glu	Lys	Lys	Cys	Val	Asp	Lys	Phe		
465					470					475					480		
Cys	Ser	Asp	Ser	Ser	Ser	Asp	Cys	Gly	Ser	Ser	Ser	Gly	Ser	Val	Arg		
		485						490					495				
Ala	Ser	Arg	Gly	Ser	Trp	Gly	Ser	Trp	Ser	Ser	Thr	Ser	Ser	Ser	Asp		
		500						505				510					
Gly	Asp	Lys	Lys	Pro	Met	Val	Asp	Ala	Gln	His	Phe	Leu	Pro	Ala	Gly		

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<210> 2333
<211> 501
<212> DNA
<213> Homo sapiens
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<400> 2333
cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc
60
gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatagtgca
120
gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
180
aaaagctatc atattgctta tgaagcacat aaaggctcagt tccgaaaaaa cggattacca
240
tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
300
acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
360
```

gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa
 420
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt
 480
 gcgattgcc aagatgtacg c
 501

<210> 2334
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2334
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala
 1 5 10 15
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
 20 25 30
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
 35 40 45
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
 50 55 60
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
 65 70 75 80
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
 85 90 95
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
 100 105 110
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
 115 120 125
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
 130 135 140

<210> 2335
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2335
 ggatcctgag cgtggggaact tctttgcact ccacagaacc ctcaacttgta cctctacttt
 60
 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac
 120
 cccatggggc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
 180
 accgcctgc agttggaaca ggaggctgag agctttaggg agctggaggc cctgcccag
 240
 ggcagccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc
 300
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca
 360
 gcatcttcat cagcatcggg cactagt
 387

<210> 2336

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2336
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1 5 10 15
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
 20 25 30
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Ala Glu Ser
 35 40 45
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50 55 60
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
 65 70 75 80
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
 85 90 95
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
 100 105

<210> 2337
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 2337
 ngagaagagg aggagtcac gccaggggcc gccatctcca gccctcgcca agccgctggg
 60
 accatgtgca gctcaagaat gccctccggc ccatcgccct cggggcaggg gaagggcagc
 120
 ttctctgcac cagcttcct gctgggctcc agggcccaca ggctgaggcc gggggcccag
 180
 ggggtcaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctccgggcaga
 240
 cctgcgggat cctcgtctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
 300
 ctgaggtccg tgggcaggcg ggctgggccc aacgtgggt caccgacctc ctcaaagct
 359

<210> 2338
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2338
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1 5 10 15
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
 20 25 30
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35 40 45
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50 55 60
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

```

65          70          75          80
Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser
          85          90          95
Ser Lys

```

```
<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
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<400> 2339
acgcgtggcg tcagtccagg cagacttggg aggtcgccta caccgtcaac tcggttgca
60
ccctgtcctc caccttcgtc gtcgcagtcg tcagtgtcct gtggtttgtg ccctccgggc
120
actggtcccc gtagggcctt taatgctggg gcgctcggcg cgatgtgcc a gttccttgg
180
gagttactcc tctacactgg tgtgaacaag accggagaat tccccccat attctcgtt
240
ccgctcgtc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg
300
gttgctctgc ggcacggtcg gcagggggat catgtcatga gtccgacggt gagcgagcgg
360
cgtcttagcg cgccaatgcg acgtggcatc gtggcactgt gcgtggcgat ggccttcgtg
420
ttgtcggggg gcggtgctg
439
```

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<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
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<400> 2340																
Met	Cys	Gln	Phe	Leu	Gly	Glu	Leu	Leu	Leu	Tyr	Thr	Gly	Val	Asn	Lys	
1				5					10					15		
Thr	Gly	Glu	Phe	Pro	Pro	Ile	Phe	Ser	Phe	Pro	Ala	Arg	Pro	Ala	Arg	
			20					25					30			
His	Trp	Asp	Trp	Leu	Leu	Arg	Gly	Ser	Gly	Cys	Arg	Thr	Leu	Val	Ala	
		35					40					45				
Leu	Arg	His	Gly	Arg	Gln	Gly	Asp	His	Val	Met	Ser	Pro	Thr	Val	Ser	
	50					55					60					
Glu	Arg	Arg	Leu	Ser	Ala	Pro	Met	Arg	Arg	Gly	Ile	Val	Ala	Leu	Cys	
65					70					75					80	
Val	Ala	Met	Ala	Phe	Val	Leu	Ser	Gly	Cys	Gly	Ala					
				85					90							

```
<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
```

<400> 2341

gccaaacctc cctccatcc tgcccaagat ggatcttgct gagcctccct ggcatatgcc
 60
 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag
 120
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca
 180
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag
 240
 agtcctgggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt
 360
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1			5					10						15	
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
			20					25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
			35				40					45			
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
			50				55				60				
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65					70					75				80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
				85				90						95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105					110		

Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

ggccccgaga agatgctgat gccttcacag tttcccaacc agggccagca gggattctct
 60
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
 120
 agccctgata agagctcaat gcccatgagc aacgtgggca ccacccggct cagccacatg
 180
 cctctgcccc ctgcgtccaa tcctcctggg accgtgcatt cagccccaaa ccgggggcta
 240
 ggcaggcggc cttcggacct caccatcagt attaatacaga tgggctcacc gggcatgggg
 300

cacttgaagt cgcccaccct tagccaggtg cactcacccc tggtcacctc gccctctgcc
 360
 aacctcaagt caccacagac tccctcacag atggtgccct tgccttctgc caaccgcga
 420
 ggacctctca agtcgccccca ggtcctcggc tcctccctca gtgtccgttc acccactggc
 480
 tcgcccagca ggtcaagtc tccttccatg gcggtgcctt ct
 522

<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser	Gln	Phe	Pro	Asn	Gln	Gly	Gln
1				5					10					15	
Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp
			20					25					30		
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
			35					40					45		
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
			50					55				60			
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
65						70				75					80
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
						85				90				95	
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
			100					105					110		
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
			115					120					125		
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
			130					135				140			
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
145						150				155					160
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
				165						170					

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

nagatctccg tcttgatctt gagcaccgag gcactggggg gggaggacag cagccgcggg
 60
 ggctccacc agcccggtc caggccgcct gggctcgacg cgctggacag gcgcccgcgg
 120
 ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag
 180
 gcctgcgcgc ccgcctcgcc tgcgtgtcc gagtccttgg cgctgtcgga cgtgagtgc
 240
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat
 300

gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
 360
 acacccatgg acatcgaca gctcccccat ctgccggaga aaacttccga atcctcggag
 420
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagAAC
 480
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagccccgacc
 540
 ggaagaagtc gggcaacgcg t
 561

<210> 2346
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2346
 Xaa Ile Ser Val Leu Ile Leu Ser Thr Glu Ala Leu Gly Gly Glu Asp
 1 5 10 15
 Ser Ser Arg Gly Gly Leu His Gln Pro Ala Ser Arg Pro Pro Gly Leu
 20 25 30
 Asp Ala Leu Asp Arg Arg Arg Arg Leu Ala Leu Pro Pro Phe Cys Arg
 35 40 45
 Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro
 50 55 60
 Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp
 65 70 75 80
 Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile
 85 90 95
 Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu
 100 105 110
 Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu
 115 120 125
 Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser
 130 135 140
 Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn
 145 150 155 160
 Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr
 165 170 175
 Arg Ser Pro Thr Gly Arg Ser Arg Ala Thr Arg
 180 185

<210> 2347
 <211> 375
 <212> DNA
 <213> Homo sapiens

<400> 2347
 atcagcgaag aacacggcag gaccctggaa gacgccgccg gtgaattgaa gcggtggtatc
 60
 gagaacgtcg agtacgctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac
 120
 gtcggtccga acatcgacgc ctggtccgat ttccagccgc tgggctggtt ggcggggatc
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc
 240
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc
 300
 cagctgttgc aggaagccgg ttgccccaaa ggtgtgctga acgtggtgca tggtgacaag
 360
 accgcggtgg acgcg
 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
1				5				10						15	
Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
			20				25						30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
		35				40					45				
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50					55					60				
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65				70					75					80	
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85					90					95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
		100					105					110			
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
		115					120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

nnnaaaaaaaaa aaaaaacacaa tattttaatgg acgcggttta ttcagcagggt
 60
 gctgacaaaag tttttggtgt cccaggagat tttaatctag cctttttaga tgatattatt
 120
 gcacataatc atatttaaag gattggtaat acaaatgaac ttaatgcaag ttatgccgct
 180
 gacggatatg cacgtattaa tggcatcggg gcaatggtaa caacatttgg agtgggtgaa
 240
 ttaagtgtg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc
 300
 actggggcac ctactcgagc tgtagaacia gaaggcaaat acgttcacca ttccttgggc
 360
 gaaggaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct
 417

<210> 2350

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2350

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Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val
 1           5           10           15
Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
          20          25          30
Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
          35          40          45
Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
          50          55          60
Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
65          70          75          80
Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
          85          90          95
Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
          100         105         110
Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
          115         120         125
Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
          130         135

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<210> 2351
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 2351

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naccggttgc cgcgcgataa ctctggtgag ggtcttgctg gggccctgct ggccttgtt
60
ggctccgccc agctgtgcca ccgttctctgg atcaccgacc agtatgaccg gttcgtgcgt
120
ggcaatactg tgctcgctca gccgaatgat gccggcatga ttcgtattga cgacaacctc
180
ggcatcgcgc tgtccttgga cgctaacgga cgccagacca cccttaacct gtatcttggc
240
gcccagctgg ctctttgcca ggcttaccgg aatgtggctg tctctggcgc aactccggtg
300
gctgtcactg attgcctcaa ttatggctcc ccgtacgata ccgatgtcat gtggcaattc
360
gacgagacca tccttgggtct ggttgacggc tgccgcgagc ttggcgtgcc gggttacgggc
420
ggtaacgttt ccctgcacaa ccgcactgga gatgagtcga ttcggcctac tccgctcggt
480
ggtgtgctcg gcgttattga tgacgtgcat cgtcgcatcc cgtcggcctt cgcacacgac
540
ggcgacgctg tcttgctgct aggaacgacg aagtgcgagt tcggcggatc ggtctatgag
600
gacgtcatcc acgctggcca cctaggcggg atgccccga tgcccgaact gaatgccgag
660
aaggccctgg ccgcggtgat ggtggaagcg tcgaag
696

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<210> 2352
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 2352
 Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu
 1 5 10 15
 Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr
 20 25 30
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro
 35 40 45
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
 50 55 60
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
 65 70 75 80
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
 85 90 95
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
 100 105 110
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
 115 120 125
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
 130 135 140
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
 145 150 155 160
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
 165 170 175
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys
 180 185 190
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
 195 200 205
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala
 210 215 220
 Ala Val Met Val Glu Ala Ser Lys
 225 230

<210> 2353
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 2353
 nnagcaatct cagaagaatt gctggctgag ttttcaaact atggtgtcaa agtagtaccg
 60
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<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356

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Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr
          35          40          45
Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
          50          55          60
Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
65          70          75          80
Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
          85          90          95
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          100          105          110
Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
          115          120          125
Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
          130          135          140
Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
          145          150          155          160
Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
          165          170          175
Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
          180          185          190
Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
          195          200          205
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Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
          225          230          235          240
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          245          250          255
Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
          260          265          270
Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
          275          280          285
Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
          290          295          300
Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
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Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
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Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
          370          375          380
Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
          385          390          395          400
Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
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Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

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1721

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	885		890	895
Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr				
	900		905	910
Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg				
	915		920	925
Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln				
	930		935	940
Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser				
945		950		955
Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Ser Trp Ile				
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Glu Ser Leu Arg Arg Lys Lys Ser Asp Ser Ala Ser Ser Pro Ser Gly				
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<211> 408

<212> DNA

<213> Homo sapiens

<400> 2357

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<210> 2358

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2358

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	20	25	30	
Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu				
	35	40	45	
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser				

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Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
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<210> 2360
 <211> 108
 <212> PRT
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 35 40 45
 Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
 50 55 60
 Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
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 Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
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<210> 2361
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 2361

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<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

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			20					25					30		
Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu	
		35					40					45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
	50					55				60					
Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65					70				75					80	
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Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

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<210> 2364
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 <212> PRT
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 50 55 60
 Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys
 65 70 75 80
 Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln
 85 90 95
 Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala
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<210> 2365
 <211> 429
 <212> DNA
 <213> Homo sapiens

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<210> 2366
 <211> 132
 <212> PRT
 <213> Homo sapiens

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 35 40 45
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 50 55 60
 Leu Glu Thr Glu Ser His His Arg Cys Glu Asn Pro Asp Gly Val
 65 70 75 80
 Asp Leu Pro Trp Gly Val His Ala Arg Ala Ser Thr Leu Ala Pro Val
 85 90 95
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<210> 2367
 <211> 474
 <212> DNA
 <213> Homo sapiens

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 gggggtcacg agctcaccga cgcgcgcgcg ttgcctcgt ggggcgctga tttcgtcaaa
 120
 tacgatcggg gctccggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcatg
 180
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaacct caacagcgaa
 240
 tcgcgggatc ggtccggagc ccaattcgat tggggcggtg tggcaacct gacacgtacc
 300
 accaacgaca tctcgcgggt gtggaccact cggccgggcg gtgccgatgc gacaccggca
 360

tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt
 420
 gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgtcggcaac gcgt
 474

<210> 2368
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2368
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly
 1 5 10 15
 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala
 20 25 30
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
 35 40 45
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
 50 55 60
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
 65 70 75 80
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
 85 90 95
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
 100 105 110
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
 115 120 125
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
 130 135 140
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
 145 150 155

<210> 2369
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 2369
 ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca
 60
 aaggggagcg ccttgggacc taaccagag ccccatctca ccttcccccg ttctttcaaa
 120
 gtgcctcccc caacccagct caggacttcg tccatcccag ttcaggaagc acaagaggct
 180
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct
 240
 tccacatccg ccccgccctcc caggtctacc cagacagggc ccccgagcnc agactgcct
 300
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca
 360
 gatgaacgag ctgggactcc gcctccagcc cctccccctgc cccctcct
 408

<210> 2370

<211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2370
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
 1 5 10 15
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
 20 25 30
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
 35 40 45
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
 50 55 60
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
 65 70 75 80
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
 85 90 95
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
 100 105 110
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
 115 120 125
 Pro Ala Pro Pro Leu Pro Pro Pro
 130 135

<210> 2371
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2371
 gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcgggtg
 60
 agagggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga
 120
 ggcaggcact agtcatgagg caagagatgc ctcaagaagag gatgctggcc gcagggcaca
 180
 gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaaca
 240
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
 300
 caggcgggcc aaggttttca tgcagcn
 327

<210> 2372
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2372
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1 5 10 15
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
 20 25 30
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys


```

          35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
          50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
          85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
          100

```

<210> 2373
 <211> 591
 <212> DNA
 <213> Homo sapiens

```

<400> 2373
gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc
180
agaaaatggt accaaagttg agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgcttttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcttg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

```

<210> 2374
 <211> 167
 <212> PRT
 <213> Homo sapiens

```

<400> 2374
Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
1          5          10          15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
          20          25          30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
          35          40          45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
          50          55          60
Asn Glu Asn Met Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
65          70          75          80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

```
<210> 2375
<211> 535
<212> DNA
<213> Homo sapiens
```

```
<210> 2376
<211> 178
<212> PRT
<213> Homo sapiens
```

1730

				85					90					95					
Ser	His	Leu	Phe	Arg	Gly	Ala	Thr	Ser	Gly	Thr	Ile	Met	Arg	Asn	Asp				
			100						105					110					
Ala	Tyr	Arg	Phe	Ile	Arg	Leu	Gly	Thr	Phe	Val	Glu	Arg	Ala	Asp	Asn				
		115					120						125						
Thr	Leu	Arg	Leu	Leu	Asp	Ala	Arg	Tyr	Glu	Met	Phe	Gly	Glu	Glu	Ser				
	130					135						140							
Glu	Glu	Val	Ser	Asp	Leu	Ser	Ala	Arg	Gly	Tyr	Tyr	Gln	Trp	Ser	Ala				
145				150						155					160				
Leu	Leu	Arg	Ala	Leu	Ser	Ser	Phe	Glu	Ala	Tyr	Thr	Glu	Leu	Tyr	Pro				
			165						170					175					

Asn Ala

<210> 2377

<211> 622

<212> DNA

<213> Homo sapiens

<400> 2377

```

acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
60
agcaccagg agatgaaagg aaccaatcct ggggtggcct gcaccaggct tatcaacccc
120
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
180
ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
240
atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
300
aatataatgt tctttgcctt gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
420
agagttagaa ttattaatag ttctatctta ctatttaatt taatcatagt taatgatgag
480
aatttcttaa atttaaagct tctgatgatg ctaaatgtgc atttctcatg attccttaaa
540
acaatttttg taaattctat tcttaggacc ttctgctttc agaaaaatta atgtcttgta
600
ttcttcgtat tggaggagat ct
622

```

<210> 2378

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2378

Met	Ser	Phe	Ile	Met	Pro	Leu	Lys	Ser	Phe	Arg	Ala	Lys	Asn	Ile	Ile				
1				5					10				15						
Phe	Thr	Phe	Gln	Phe	Tyr	Val	Cys	Gln	Ser	Ile	Leu	Phe	Tyr	Ala	Phe				
		20					25					30							

Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

	35					40					45				
Thr	Ser	Ile	Cys	Trp	Phe	His	Phe	Ile	Arg	Arg	Val	Lys	Tyr	Phe	Phe
	50					55					60				
Met	Ser	His	His	His	Arg	Ser	Phe	Pro	Phe	Val	Cys	Gln	Gly	Leu	Ile
65					70					75					80
Ser	Leu	Val	Gln	Asp	His	Pro	Gly	Leu	Val	Pro	Phe	Ile	Ser	Trp	Val
				85					90					95	
Leu	Pro	Gln	Lys	Gly	Ala	Ser	Val	Leu	Pro	Tyr	His	Phe			
			100					105							

<210> 2379

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2379

```

tcattgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggggaagct gtgcagcagt ggggagaaaag ca
342

```

<210> 2380

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2380

Met	Thr	Trp	Arg	Leu	Arg	Lys	Leu	Asn	Lys	Thr	Ala	Gly	His	Pro	Gly
1				5					10					15	
Ala	Pro	Ala	Pro	Val	Thr	Ala	Glu	Asp	Gln	Cys	Thr	Leu	Pro	Ser	Gly
			20					25					30		
Arg	Ser	Thr	His	Gly	Thr	Thr	Gly	Lys	His	Asn	Ile	His	Ala	Cys	Glu
		35					40					45			
Pro	Arg	Arg	His	Thr	Pro	Ala	Val	Pro	Arg	Ala	Thr	Val	Leu	Cys	Arg
	50					55					60				
Ser	Gly	Gln	Met	Arg	Ala	Ser	Arg	Thr	Arg	Gly	Leu	Thr	Arg	Ser	Pro
65				70					75						80
Cys	Pro	Leu	Gly	Ser	Cys	Ser	Pro	Leu	Pro	Ser	Trp	Arg	Ala	Gly	Arg
				85					90					95	
Thr	Pro	His	Thr	His	Thr	Ser	Arg	Glu	Ala	Val	Gln	Gln	Trp	Gly	Glu
			100					105					110		

Ser

<210> 2381

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

```
gtgcaccctg gccatatgga cgccagcgac gtcggcgtct tgcgtgacgt ggaaccgata
60
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
120
ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat
180
ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggt gacgggggca
240
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat ccccaggcca
300
ccatcgagcg ttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
360
cgggagctga ccgctcgtg aagaggctgt caggatcatgt acccatcgct gtggtgtcga
420
attccccgac gcgt
434
```

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

```
Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp
1          5          10          15
Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser
20          25          30
Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val
35          40          45
Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His
50          55          60
Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu
65          70          75          80
Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg
85          90          95
Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn
100         105         110
Ser Pro Thr Arg
115
```

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

```
acgcgtgcgt tcagatgagc gccggacgaa actcctcggc cgcttcggca ggcattggatt
60
catgtcggca cgggcctttg aacaggatcg ccgtcgctg gctatccgcc gcgggtgggg
120
```

cagaaaacgc ccactctccc ttccccaggc gccggccgtc gagtcgtcta cgcaacgcac
 180
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc
 240
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctcg
 300
 ctttcttgat gccaccacc ttgttacata ttctgccatg caaacacct tgtgattttt
 360
 ggccggagtgc aacatgggtat gtgtatgccca ctg
 393

<210> 2384
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 2384
 Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr
 1 5 10 15
 Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp
 20 25 30
 Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala
 35 40 45
 Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val
 50 55 60
 Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu
 65 70 75 80
 Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg
 85 90 95
 Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg
 100 105 110
 Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg
 115 120 125

<210> 2385
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 2385
 acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat
 60
 gcactgtgct gtggactctt gttgtggggc cctaggtctg cccagcattt tggggttcac
 120
 cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggc
 180
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc
 240
 caagaccctt caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc
 300
 caagggcctt tacgcactac tctctggggc ccactgtctg cactctt
 347

<210> 2386

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2386
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1 5 10 15
 Cys Cys Gly Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
 20 25 30
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
 35 40 45
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
 50 55 60
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
 65 70 75 80
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
 85 90 95
 Pro Leu Arg Thr Leu Trp Gly Pro Leu Ser Ala Leu
 100 105

<210> 2387
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 2387
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg
 60
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc
 120
 cgctacctgc gcgcctgtg ctcccaccac gcggcaccga cccgggcgcg ccccgggccc
 180
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgct ctgctgggga
 240
 gtcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt
 300
 gggttgtgag tgctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
 360
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca
 420
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg
 480
 tgtgcctgtg tgtccgtatt tgagtgtcta caggaatgtg ggtgggtgagt acccgatatg
 540
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
 600
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
 660
 gtttagaggtt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
 715

<210> 2388
 <211> 58
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
          20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
          35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
          50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagtccatg
120
tataccaagt tcgttatcgt caccgacgac gatatacaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataaacag
240
ccgatcgact acctcgactt cgctcgcgcg gtgtccggcc tgggttcgaa gatggggctc
300
gatccacgac acaaattggcc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
          20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
          35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
          50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
          65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
          85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
          100          105          110

```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

```
gtcgactaac ctgcgtacag ccgccaccct acgttttagtc gcgaagcgtg tcggctccat
60
gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcaa
120
aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttcact
180
gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca
240
gtgcctctgc cacggcgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga
300
tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttcccatcg
360
agtgcctgac cgcaccaaag ccctgcct
388
```

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

```
Met Asn Lys Val Leu Pro Asp Pro Pro Ile Asp Pro Ala Lys Asp Arg
1           5           10           15
Val Ala Phe Asn Arg Ala Ile Asp His Tyr Leu Pro Thr Gln Gly Phe
20           25           30
His Cys Val Asn Glu Asp Leu Ser Phe Glu Asp Ala Leu Leu Tyr Thr
35           40           45
Ala Ser Leu Leu Asp Ser Ala Ser Ala Thr Ala Leu Asp Cys Gly Glu
50           55           60
Leu Leu Gln Ser Pro Glu Arg Ala Lys Ile Leu Ala Val Trp His Leu
65           70           75           80
Leu Glu Ile Ala Lys Thr Thr Val Asp Arg Phe Pro Ile Glu Cys Leu
85           90           95
Thr Ala Pro Lys Pro Cys
100
```

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

```
aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtccggc
60
atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg
120
tgcgcccgt tccgcatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc
180
atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
240
```

atgacggcta tgccgcttgt tgttgcgcgc gaggggtgtat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgtcg atgcggataa taagctcacc
 360
 ggccctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2394
 Asn Leu Ser Thr Glu Asp Gln Ala Glu Gln Val Glu Ile Val Lys Arg
 1 5 10 15
 Ser Glu Ser Gly Met Val Thr Asp Pro Ile Thr Ala Arg Pro Asp Met
 20 25 30
 Thr Ile Gly Glu Val Asp Ala Leu Cys Ala Arg Phe Arg Ile Ser Gly
 35 40 45
 Leu Pro Val Val Asp Glu Asp Gly Thr Leu Met Gly Ile Cys Thr Thr
 50 55 60
 Arg Asp Met Arg Phe Glu Pro Asp Phe Asp Arg Lys Val Ser Glu Val
 65 70 75 80
 Met Thr Ala Met Pro Leu Val Val Ala Arg Glu Gly Val Ser Lys Lys
 85 90 95
 Glu Ala Leu Glu Leu Leu Ser Ala Asn Lys Val Glu Lys Leu Pro Ile
 100 105 110
 Val Asp Ala Asp Asn Lys Leu Thr Gly Leu Ile Thr Val Lys Asp Phe
 115 120 125
 Val Lys Thr Glu Gln Tyr Pro Asn Ala
 130 135

<210> 2395
 <211> 362
 <212> DNA
 <213> Homo sapiens

<400> 2395
 aagcttttcag aggagtttgc taaagtgtta aggatttgca tatttttcaac ttttagtcata
 60
 tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggcttttcac aacaactaac
 120
 ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca
 180
 atatcatcat actttccaaa tatttttgat tttttagaca tcaactgaag ttgtgaccat
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 2396
 Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro
 1 5 10 15
 Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His
 20 25 30
 Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
 35 40 45
 Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
 50 55 60
 Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
 65 70 75 80
 Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
 85 90 95
 Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
 100 105 110
 Asn Ser Ser Glu Ser
 115

<210> 2397
 <211> 449
 <212> DNA
 <213> Homo sapiens

<400> 2397
 nacagcacac tccgcctcct ccgacgatca tagctttcac gtcggacatg atcccccgcc
 60
 tagtgtacta ctggtccttc tccgtccctc cctacgggga ccacacttcc tacaccatgg
 120
 aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca
 180
 agggaaaccc gtactctgac ctgggtaacc ataccacatg cagggtatcgt gatttccgat
 240
 acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag
 300
 ccaagctggc ttttatcatt gtcatggagc acgtcatcta ctctgtgaaa tttttcattt
 360
 catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc
 420
 taacccaaaa gcttcttcat gagaatcac
 449

<210> 2398
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 2398
 Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
 1 5 10 15
 Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

		20					25				30				
Gln	Thr	Ser	Lys	Thr	Lys	Ala	Arg	Glu	Thr	Arg	Thr	Leu	Thr	Trp	Val
		35					40					45			
Thr	Ile	Pro	His	Ala	Gly	Ile	Val	Ile	Ser	Asp	Thr	His	Leu	Asp	Thr
		50				55					60				
Pro	Arg	Ser	Ile	Asn	Thr	Thr	Ser	Thr	Ile	Gly	Met				
65					70					75					

<210> 2399

<211> 344

<212> DNA

<213> Homo sapiens

<400> 2399

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acgcgcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
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cttgatatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
180
agtcaaacccc tttgctggtc cggccaggct tggagggggt cgaaaaccta caacgccaca
240
aaacgggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
300
accgatatggc ttgagatgcg acacacgctc ggggtggatt ggtc
344

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<210> 2400

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2400

Met	Leu	His	Glu	Thr	Gly	His	Ala	Leu	His	Tyr	Gln	Ala	Ala	Gly	Lys
1				5					10					15	
His	Asn	Leu	Tyr	Phe	Glu	Arg	Val	Ala	Pro	Val	Glu	Ile	Met	Glu	Phe
		20					25					30			
Val	Ala	Tyr	Cys	Leu	Gln	Phe	Leu	Thr	Ile	Glu	Arg	Leu	Ala	Met	Ser
		35				40					45				
Gly	Glu	Leu	Ser	Gly	Lys	Glu	Gln	Glu	Leu	Val	Lys	Pro	Phe	Ala	Gly
		50			55						60				
Pro	Ala	Arg	Leu	Gly	Gly	Val	Arg	Lys	Pro	Thr	Thr	Pro	Gln	Asn	Gly
65				70					75					80	
Ser	Ser	Thr	Gly	Phe	Ile	Asn	Ser	Leu	Lys	Ser	Arg	Gln	Val	Lys	Asn
			85				90					95			
Ser	Ile	Pro	Tyr	Gly	Leu	Arg	Cys	Asp	Thr	Arg	Ser	Gly	Trp	Ile	Gly
		100					105					110			

<210> 2401

<211> 479

<212> DNA

<213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggt gtcaccgacc agatgcgctc tgggcgctgc
 60
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat
 120
 gactttgagt tttcctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctacttccc tcgagctcac aggcgacgac ggcggtggt ggtcattttt caccaacctc
 300
 gtggacaagt acggcgagcgt cccggccgag gtcatgcctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgca tatcgccacc atcatccgcc gcgccgcgca ccgtgcggtg
 420
 gaaggcgagg gggatcgcg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35				40					45				
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50				55					60					
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65				70					75					80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85				90						95		
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100					105						110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
		115				120					125				
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130				135						140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145				150					155						

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcataaacg gcgataaccc gctggactcg tctgcggttc acccggaagc ctaccgcgtg
 60
 gtgcagcgta ttgccgccga gaccggccgt gatatccggt cgctgatcgg tgacgccgcg
 120

ttcctcaagc gcttggaacc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc
 180
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc
 240
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
 300
 ggcggtggtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac
 360
 ggtttggtgc acatctctgc actttcg
 387

<210> 2404
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2404
 Xaa Met Asn Gly Asp Asn Pro Leu Asp Ser Ser Ala Val His Pro Glu
 1 5 10 15
 Ala Tyr Pro Leu Val Gln Arg Ile Ala Ala Glu Thr Gly Arg Asp Ile
 20 25 30
 Arg Ser Leu Ile Gly Asp Ala Ala Phe Leu Lys Arg Leu Asp Pro Lys
 35 40 45
 Lys Tyr Thr Asp Glu Thr Phe Gly Val Pro Thr Ile Thr Asp Ile Leu
 50 55 60
 Gln Glu Leu Glu Lys Pro Gly Arg Asp Pro Arg Pro Glu Phe Lys Thr
 65 70 75 80
 Ala Glu Phe Gln Asp Gly Val Glu Asp Leu Lys Asp Leu Gln Pro Gly
 85 90 95
 Met Ile Leu Glu Gly Val Val Thr Asn Val Thr Asn Phe Gly Ala Phe
 100 105 110
 Val Asp Ile Gly Val His Gln Asp Gly Leu Val His Ile Ser Ala Leu
 115 120 125
 Ser

<210> 2405
 <211> 859
 <212> DNA
 <213> Homo sapiens

<400> 2405
 ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc
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 aaattaaatg gaataatttg ctttatgaga agctcaccat tgggggtcatt cttatttttt
 120
 ctcaactccac atttcactac aaaccaagga aagctccctc atggaccgac atctgggtgag
 180
 ccttcatctc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca
 240
 gcaatcctgg taccaacgaa tggtcacca ccaccaccc caatgcccag accgcagacc
 300
 tgcattcctc ccatttcaca gcccacaaatc caaacgtta ttcattctac ctcccatcct
 360

actcctcagc aatttcttcc accgtagact ctggttaatt ggactgactg aagcccaggg
 420
 gtcagtttct gtctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc
 480
 ctgctatagg ctgctgcac tccccctgca ggtgctgggg acaccgcaac cctcctctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc
 720
 tctcagttcc cagtgttagc tatggggccc agcacacagg gaacagcagt tcaattaccc
 780
 agttcactga agggcagacc tgggatcata caggagcaa ggaagcttga gccccttcag
 840
 gagaagggga agaacgcgt
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1				5					10					15	
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
			20					25					30		
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35					40				45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55					60				
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70				75					80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85					90						95	
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
		115					120					125			
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggt ttatcttcag catggtgatc gcgattgggt tagccgttat ggctgcggtc
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gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatgggtggg
 120
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt
 180
 atccccgtca tctttgcctc gtcgatactg taccttcggg tgctctacgc aactttccgg
 240
 ccgcagacgt ccgcggcaaa gtggatcggg cactacttca cgcgcggtga ccatccggg
 300
 tac
 303

<210> 2408
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2408
 Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val
 1 5 10 15
 Met Ala Ala Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val
 20 25 30
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr
 35 40 45
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile
 50 55 60
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg
 65 70 75 80
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly
 85 90 95
 Asp His Pro Val Tyr
 100

<210> 2409
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 2409
 ccatggtttc aagccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca
 60
 cctcccggcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt
 120
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc
 180
 tcggccccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg
 240
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtgtg gg
 322

<210> 2410
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 2410

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Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
           20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
           35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
           50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
           85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
           100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

```

ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacagggg gacagagggg gctgtgagag ccctgaggct gagtggcttt
120
ctggggaagc accatcccta gggacctcgc cgttcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtc gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtg catgcacgtc gctgaaaggc
300
aggcctgggc ccgaggcctg ggtgtgggga cgctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
           20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
           35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
           50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

```

65              70              75              80
Gly Gly Trp Arg Leu Ala Cys Gly Trp Gln Glu Gly Gly Met His Val
      85              90              95
Ala Glu Arg Gln Ala Trp Ala Arg Gly Leu Gly Val Gly Thr Pro Glu
      100             105             110
Glu Thr Val Gln Cys Gly Val Gly Gly Ala Ala
      115             120

```

<210> 2413

<211> 784

<212> DNA

<213> Homo sapiens

<400> 2413

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ccccgggagag ttgggcgggg caggggtgtt catggcatac tcgggattgt gtcatttggt
60
gtggctggat ttagggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggctcact gaggaattgg ggttcttctt gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt
240
ggctgagggtg agctcttccc atggagtgca tccttcttga tcagcctgag gagagcaggg
300
ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc
360
accaggtggc aggcttgag attgcatgga ggccccgccc cccccaacca attctttgat
420
aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag
540
ccacaggtcc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctcgggggac ctgagagtaa gttacagact tcatgaccct tcacccaaa
660
acacttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgaatt
720
tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

```

<210> 2414

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2414

```

Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn
1              5              10             15
Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly
      20             25             30
Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser

```


ctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc
 1080
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca
 1200
 cctgagcccc tggggaaggg gcccggaaca cctgctctca cctgagcccc aggtgaaggg
 1260
 gcccggaaca cctgctctca cctgagcccc aggtgaaggg gcccggaaca cctgctctca
 1320
 cctgagcccc aggtgaaggg gcccggaac acctctcacc tgaaccggg ggtcccatcc
 1380
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag
 1440
 gtgacctgg cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt
 1500
 aaggttcaca tgctggttgc ttaatcgtt tctggaggaa gaggatgaca cccacttgtg
 1560
 atggggctct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacc
 1620
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt
 1680
 cagtggaggg tgagggtgac cccatctgct atttttgtgc tcactctcat acaaccattt
 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcatatgcc tgggaagccc agccccctcag
 1800
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcattct
 1860
 tcttgagacc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca
 1920
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccaccc acctgagccc
 1980
 tcccgccag gcttcgtgct ggggtgggccc atgtgccagg acaggagggg cccggcggaa
 2040
 agccagcccc ggactcatcg tgacattgag atccactgg agggtagggg tggtataaaa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5					10					15	
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20					25					30		
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35					40					45			
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

50		55		60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met				
65		70		75
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser				80
	85		90	95
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly				
	100		105	110
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr				
	115		120	125
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro				
	130		135	140
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys				
145		150		155
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu				160
	165		170	175
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val				
	180		185	190
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val				
	195		200	205
Leu Leu Pro Glu Arg				
210				

<210> 2417

<211> 615

<212> DNA

<213> Homo sapiens

<400> 2417

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nnagatcttt ggaatgggca gaactactaa atacagttaa tgcaccaaca agggtaagta
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aagctgattt gattttcata ttgatacctc aatagttaag tgaaggacta gttattgctc
120
cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
180
acgttttttc acaactgtga tccacgccac agttgcaa atcaacata gaaaaattaa
240
ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
300
gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggagaa
360
aaatccacaa atccttttgc tttcaaaca tatgatgcta atcaagtaat tttaggtaaa
420
actatggctg aacatttacg cttaacggtg tgttattggc ataccttttg ctggaatggg
480
aatgatatgt ttgggctagg ttctttggaa cgaagttggc agaaaaattc aaatttgctt
540
gctggcgcag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
600
tattattggt ttcatt
615

```

<210> 2418

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2418

```

Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtcctggt gttgcgcggt caaacagggg ccgaggaggg acgaccgcct
60
ccccgtgacg ctgcttcttc ttctgacctg cagctgaggg gtctgttttg tgctgcttcc
120
gtccttctct cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
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<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

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Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

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85 90 95

Lys Ile

<210> 2421
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<210> 2422
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2422
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 Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys
 35 40 45
 Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala
 50 55 60
 Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg
 65 70 75 80
 Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg
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<210> 2423
 <211> 371
 <212> DNA
 <213> Homo sapiens

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gaatgcgcag actgcaagtc aaagggctct cgatgggcaa gtgtgaatct aggtatcttt
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<210> 2424
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 2424
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 1 5 10 15
 Lys Ile Leu Glu Gly Leu Leu Arg His Pro Glu Asn Arg Glu Cys Ala
 20 25 30
 Asp Cys Lys Ser Lys Gly Pro Arg Trp Ala Ser Val Asn Leu Gly Ile
 35 40 45
 Phe Ile Cys Met Thr Cys Ser Gly Ile His Arg Ser Leu Gly Val His
 50 55 60
 Ile Ser Lys Val Arg Ser Ala Thr Leu Asp Thr Trp Leu Pro Glu Gln
 65 70 75 80
 Val Ala Phe Ile Gln Ser Met Gly Asn Glu Lys Ala Asn Ser Tyr Trp
 85 90 95
 Glu Ala Glu Leu Pro Pro Asn Tyr Asp Arg Val Gly Ile Glu Asn Leu
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<210> 2425
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 2425
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<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

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 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

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 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac
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<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

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 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60
 Asn Val Pro Leu Ser Gly Lys Val
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<210> 2429
 <211> 428
 <212> DNA
 <213> Homo sapiens

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<210> 2430
 <211> 142
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
 35 40 45
 Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
 50 55 60
 Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
 65 70 75 80
 Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
 85 90 95
 Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
 100 105 110
 Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
 115 120 125
 Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala
 130 135 140

<210> 2431
 <211> 409

<212> DNA

<213> Homo sapiens

<400> 2431

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409

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<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

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Met Gly Gln Phe Ile Ile Gln Gly Gly Cys Gln Leu Asn Gly Glu Val
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Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
      20             25             30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
      35             40             45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
      50             55             60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
      65             70             75             80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
      85             90             95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
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<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataatctttt ccaggtttta ccctgaagt tcaagtgcaa
240

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<210> 2434
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2434
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 20 25 30
 Lys Ser Lys Gly Cys Val Trp Asn Thr Ala Val Thr Glu Lys Val Leu
 35 40 45
 Phe Ala Gln Ser Ala Arg Pro Leu Leu Leu Ser Leu Met Ser Pro Asp
 50 55 60
 Trp Ala Phe Ile Val Pro Cys Thr Glu Ala Ser Leu Ser Pro Arg Ser
 65 70 75 80
 Cys Leu Phe Gly Arg Gly Ser Thr Asn Gly Ser Thr Leu Pro Pro Thr
 85 90 95
 Pro Thr Ala Arg Pro Ala Gly Pro Val Val Gln Leu Glu Lys Ala Arg
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 Leu Leu Ser Ser Pro Ala Leu Cys Cys Ala Gly Ala Leu His Leu Asn
 115 120 125
 Phe Arg Gly Lys Pro Gly Lys Arg Leu
 130 135

<210> 2435
 <211> 401
 <212> DNA
 <213> Homo sapiens

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 401

<210> 2436

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2436

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			20					25					30		
Ala	Pro	Phe	Ile	Val	Phe	Glu	Asp	Ala	Asp	Ile	Asp	Gln	Ala	Val	Gln
		35					40					45			
Gly	Ala	Met	Gly	Ala	Lys	Met	Arg	Asn	Ile	Gly	Glu	Ala	Cys	Thr	Ala
	50					55					60				
Ala	Asn	Arg	Phe	Leu	Val	His	Glu	Ser	Val	Ala	Glu	Glu	Phe	Ser	Glu
65				70						75					80
Lys	Leu	Val	Ala	Glu	Phe	Glu	Lys	Leu	Asn	Leu	Gly	Asn	Gly	Met	Asp
			85						90					95	
Glu	Gly	Ile	Thr	Cys	Gly	Pro	Leu	Val	Glu	Ser	Lys	Ala	Leu	Glu	Ser
			100					105					110		
Ile	Ala	Ala	Leu	Val	Asp	Asp	Ala	Ala	Glu	Lys	Gly	Ala	Thr	Ile	Ser
		115					120					125			
Thr	Gly	Gly	Lys	Arg											
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<210> 2437

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2437

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<210> 2438
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2438
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 20 25 30
 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
 35 40 45
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
 50 55 60
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
 65 70 75 80
 Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe
 85 90 95
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<210> 2439
 <211> 4425
 <212> DNA
 <213> Homo sapiens

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 4425

<210> 2440

<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

Pro	Ser	Ala	Ser	Asp	Gln	Ser	Thr	Trp	Tyr	Leu	Asp	Glu	Ser	Thr	Leu
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Thr	Asp	Asn	Ile	Lys	Lys	Thr	Leu	His	Lys	Phe	Cys	Gly	Pro	Ser	Pro
			20					25					30		
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35					40					45			
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50					55				60					
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65				70					75					80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Leu	Glu	Ile	Leu	Thr	Asp
			85					90					95		
Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
			100					105					110		
Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
		115					120					125			
Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
	130					135					140				
Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
145					150					155				160	
Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
			165					170					175		
Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
			180					185					190		
Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
		195					200					205			
Glu	Glu	Ala	Tyr	Pro	Leu	Pro	Gly	Val	Thr	Tyr	Ser	Gly	Thr	Asp	Arg
	210					215					220				
Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
225				230						235				240	
Ser	Arg	Ser	Gly	Gly	Leu	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu
			245					250					255		
Pro	Thr	Glu	Pro	Ala	Val	Arg	Pro	Lys	Glu	Pro	Gly	Thr	Lys	Arg	Lys

1762

1763

1125 1130 1135
 Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser
 1140 1145 1150
 Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala
 1155 1160 1165
 Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly
 1170 1175 1180
 Thr Glu Pro Val Thr Val Ala Ala Ala Val Thr Ala Ala Ala Thr
 1185 1190 1195 1200
 Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly
 1205 1210 1215
 Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln
 1220 1225 1230
 Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro
 1235 1240 1245
 Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro
 1250 1255 1260
 Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg
 1265 1270 1275 1280
 His Gly Lys Ile Leu Gly Ile His Arg Gly Leu Glu Trp Val Leu Trp
 1285 1290 1295
 Glu Tyr Asn Trp Ser Val Gly Glu Ser Trp
 1300 1305

<210> 2441

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 2441

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 ggaggacaca gaaggatgga gggaaaggca ccactcacag aggcggcgct ggagaatttt
 120
 ccatttggtta ttttgggttt ggtgaacatg cactttgcgt catgcaaatac aggtttctaa
 180
 acattaacaa ccggagagaa atgacatttt ggggccgccg gtgactcttg cgtgcctctg
 240
 ctgccccctg gtggcagccc cgagtcactt ccagcagggc cccccaccc caagggccca
 300
 gcctcgggca ggaagggtag aaagcccccg ccgtggttct gccacgaggt ctctggaaa
 360
 tgaggggaac agcacagcga cgtccttgcg tcctaaatgc atcccttgtt ggccgttttt
 420
 cgccacacag gcttggcaaa atctctgcgt cactgagcag cattttaacc tcttgaatga
 480
 gatgcctccg accttttgga tcctctttct gcacctctca ggggacaggt cccgtctgta
 540
 cggcgtgcc tacgagaaac ccaagttcat tactgcagcc aaaggaaagg tgcaggcggg
 600
 gggaggctcc tgcaaggtag tgcgtctggc cataagtccc actgccttct cccacctgct
 660
 ggctgtgcc cagcagttcc ggaagcagac ccaggcccag gtgtacagtg aggacatggc
 720

cctgaacata ggctcggaa cagaaggcct gcaggtggaa gagaaggagc gccctgtgca
780
gaggctcagt agcgtcctgg ggcccctgga ggagcttctg cagccgctat tccccctgct
840
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900
gggcaaagac aaggagagga aaacgtccac aggacaacac agcacagtcc agcctgaggt
960
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1020
ctctgtgttc gatgaaggga caatttcctc tgtgtcacga gaattttctc ttcaaagtct
1080
gtggaatcgc ctccataaag aagagacaga aggtggcgtg aaaaaggagg gaagaagcag
1140
agaccccaaa aagagaagcc tagcgaagaa gggcaggaag ggcagcatcc cccggaccat
1200
ccccctgac tgcatacatg tcgactcaga caacttcaag ttcgtcgtgg acccatacga
1260
ggaggcccag ggcccagaaa tgctaactcc tgtctccatc acccaagaca ttttgaaag
1320
attccaagac acattcacgt cgcgatggg cggacatctg ggaagcaagc actttccag
1380
ccaggcccag tgggagcagg ccctgggcag ctgcagcgtt ttcttcttct atggaatgga
1440
gagcttctctg tcccatatat tagtggagag attggtcgcc atgaacttgc aagagtgcc
1500
ggtggcagtc ctgctggacc tggcacggtc ctaccagagc ttgaagaggc acatggagag
1560
cgtggagcac aggagatctg ttggccgttg ggaagccaat tggagaaacg gtgcgtctcc
1620
ttcagaagat gagtggcgac gaggcggtga accaaggcga ggcttctcag accttgaagg
1680
acaagctgct gctgctccaa agctccgagc tccttccac cacgctcaac ttggtcctgt
1740
atgggctgcc gcaccaagcc atcgggtagt gcaggcctgg acctgcctcc catcagctgc
1800
tggggcccca gcaactgcct ctgcccttg ctctgcccct ctgccaaccc atccccacct
1860
cccggctccc atccccagct ccagctcgc tctccccttc ctgggcctct cccagccct
1920
tggtgcagcc tcagccaggg accctcccc agcgacttcc cgcaaggcag ccgcctggac
1980
ctcgagctct gcctgcctgt gtgcgccatg gggctctcgt cggggctgga gctgcgtctc
2040
ttcccggggc caggacaagg gcggcctccc cttggcggcg ctggtgctga gttgcttaga
2100
ccagaagact attcagaccg tgagcctgtt tttgatttga gtgttccact aaacaaacaa
2160
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2220
aaaaaaaaaa aaaaaaaaaa aaaa
2244

<210> 2442

<211> 168
 <212> PRT
 <213> Homo sapiens

<400> 2442
 Met Gly Cys Arg Thr Lys Pro Ser Gly Ser Ala Gly Leu Asp Leu Pro
 1 5 10 15
 Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys
 20 25 30
 Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro
 35 40 45
 Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
 50 55 60
 Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
 65 70 75 80
 Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
 85 90 95
 Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
 100 105 110
 Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
 115 120 125
 Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
 130 135 140
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 145 150 155 160
 Lys Lys Lys Lys Lys Lys Lys
 165

<210> 2443
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 2443
 nccgtgcgcg ctatcttgcg tcgtacgccg tccagggaag atgaaaaaat gctacaaacg
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 gccgatggac gattgcgcat tgatatcgaa tccatgcgca cctttgtaga gggcaaagaa
 120
 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag
 180
 atctatacgc gcgatgaaat tatcgaaagtc accttcggaa tggattatga ggcctttgac
 240
 cgtgccattg ataccatata caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac
 300
 cccgtctata tccgcacggt ttatggtgtc gggatatctgc ccggaggctt tgatgaagct
 360
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 361

<210> 2444
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2444

```

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1           5           10           15
Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
           20           25           30
Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
           35           40           45
Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
           50           55           60
Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
65           70           75           80
Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
           85           90           95
Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
           100          105          110
Leu Pro Gly Gly Phe Asp Glu Ala
           115          120

```

<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

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agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac
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ctcccccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag
120
aggaagcatg tttatcctgt tcagattact gcttctgccca ggctgctgct gctgttgggt
180
tctgcacatt tgctctttat taagcaaagt tcagagctgg gtgctggcaa gggaatcccc
240
tgtatttaca caggtaaacc tgagagccag agggccccaa accatcctgg ctgcgaggga
300
caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
360
aataaaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
403

```

<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

```

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1           5           10           15
Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu
           20           25           30
Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
           35           40           45
Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
           50           55           60
Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```

65		70		75		80									
Leu	Gln	Asn	Pro	Asn	Gly	Ser	Ile	Asn	Lys	Lys	Arg	Lys	Val	Pro	Phe
				85					90					95	
Thr	Gln	Glu	Pro	Glu	Lys										
				100											

<210> 2447

<211> 744

<212> DNA

<213> Homo sapiens

<400> 2447

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nacgcgtcga ggtttgccag tcacgggttg cgggtggggc aggtactact caccgtcaat
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gacctgggtgc ggcccacttc gtaccgcaat gcctgggtcaa ccctcgacac tttgctgggg
120
ttgggcgtcg tgccgatcgt caacgagaac gacacggtcg ccaccggaga aattcggttt
180
ggcgataatg atcggcttgc tgccctggta gccgagctgg tgcgcgtca agccctcatt
240
ctgctctctg acgttgacgc cttgtacacc gcccatccgg attcaccgga tgctcgtcgc
300
gtggagggttg tggaggacat cgatgcattg gatgtcgata ccataaaagc tggttcgggg
360
gtgggaaccg gcggcatgac cacgaaactt gaagccgccc gaatggccac ctgtgccggg
420
gtaccggtgg tactcgcagc ggcggtggat gccccggacg ttctggctgg tgccccctg
480
ggtacctact tccgcccgt ggcgacgcga cggccccgac ggttgctgtg gttggccgac
540
gctgccaccc cgcagggaca gatcgtcatc gacgacggag ctgtcgaagc tttgacacag
600
cgtcattcct cgttgttggc ggtgggtgtg actcgggtac acggggattt ccaagcaggc
660
gacccagtga cgatcctggc ctccgacggg cgagttgttg gtcgcggtat cgcccagttc
720
tcccatgatg aggtgctcgt catg
744

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<210> 2448

<211> 248

<212> PRT

<213> Homo sapiens

<400> 2448

Xaa	Ala	Ser	Arg	Phe	Ala	Ser	His	Gly	Leu	Arg	Val	Gly	Gln	Val	Leu
1				5				10				15			
Leu	Thr	Val	Asn	Asp	Leu	Val	Arg	Pro	Thr	Ser	Tyr	Arg	Asn	Ala	Trp
			20				25				30				
Ser	Thr	Leu	Asp	Thr	Leu	Leu	Gly	Leu	Gly	Val	Val	Pro	Ile	Val	Asn
		35				40			45						
Glu	Asn	Asp	Thr	Val	Ala	Thr	Gly	Glu	Ile	Arg	Phe	Gly	Asp	Asn	Asp
	50					55			60						
Arg	Leu	Ala	Ala	Leu	Val	Ala	Glu	Leu	Val	Arg	Ala	Gln	Ala	Leu	Ile


```

65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100        105        110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115        120        125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130        135        140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
      145        150        155        160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165        170        175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180        185        190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195        200        205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210        215        220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
      225        230        235        240
Ser His Asp Glu Val Arg Val Met
      245

```

<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

```

gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgctct cccctcctcc ctgggccctg tcctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccctgccg gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
tttcccccc ctttcctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

```

<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

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Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
  1          5          10          15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
      20          25          30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
      35          40          45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

      50              55              60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
65              70              75              80
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
      85              90

```

<210> 2451
 <211> 589
 <212> DNA
 <213> Homo sapiens

```

<400> 2451
naccgctgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgac
60
tgcaacgatg atcttgtagc cgatgtattg accggtgtgt gggccgatct tgtgggccag
120
gagaaggctg tcggggctct gcgtcgtgcc gccgaatcgc agccggggcg ctctcccat
180acgcatggct cattacgggt ccgcctggat caggtcggtc gaatgctgcg      240
aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
300
cgaaccngcc tgtcaggcgc ccatactgac gtcaccctcg tgcgtactga ggcgtgtct
360
attggcgctc attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
420
cggggcgtcc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgaggagct
480
gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgtgcc
540
cctactccag aggacgtcat cgtcacgatc aggtcgagat gtcggcgcc
589

```

<210> 2452
 <211> 121
 <212> PRT
 <213> Homo sapiens

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<400> 2452
Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
1              5              10              15
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
      20              25              30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
      35              40              45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
      50              55              60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
65              70              75              80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
      85              90              95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
      100              105              110
Thr Glu Ala Leu Ser Ile Gly Val Asp
      115              120

```

<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
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 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac
 120
 acaggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccagcct
 180
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccac atgaaccaag ggacacacat
 240
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca
 300
 gaggcatttg tgtgctggg catttgcagc atgactcaga acggagtatg ggggtggcgcg
 360
 gcgtggctgg ggaggtccca tcagcccgcc tctgaaacct tcccaacctg cccatcctgg
 420
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
 480
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg
 540
 gaccggccac gacgcagtgc ccacaggac caccagggtga catgggtgct gcactaggga
 600
 ggggtggcca gggaatgggt gagggtggga aagaggctgt ggacccgact tagtcatgtc
 660
 agccccccga agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 2454
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
 1 5 10 15
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
 20 25 30
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130		135		140
Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln				
145		150		155
Val Thr Trp Val Leu His				160
	165			

<210> 2455
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2455
 acgcgtcggc agaagcgtca gctgaccgtc ggagccgata tgtccccagg cgtcgtcagc
 60
 ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc
 120
 aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
 180
 gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg
 240
 ctgccgccgt tcatcaacgt gatgtcgctg gcggtggcac cgctgggcgg gttgatcggc
 300
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 360
 ggcatcgctg ccaagaat
 378

<210> 2456
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2456
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro
 1 5 10 15
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
 20 25 30
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
 35 40 45
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
 50 55 60
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu
 65 70 75 80
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
 85 90 95
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
 100 105 110
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
 115 120 125

<210> 2457
 <211> 754
 <212> DNA
 <213> Homo sapiens

<400> 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
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 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctcggtccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttatac aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata
 240
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
 360
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgacctc
 420
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcacggtt caccagagcc tatttgctgc aaaactttaa tgaagaggga acaactgaga
 540
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg
 660
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca
 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
1				5				10						15	
Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
		35					40					45			
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
	50					55					60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Ser	Phe	Cys	Ser	Ile
65				70				75						80	
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
			85					90					95		
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
		100						105					110		
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
		115					120					125			
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
	130				135					140					
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

<210> 2459
 <211> 382
 <212> DNA
 <213> Homo sapiens

```

<400> 2459
accggtgcac agatcggttct ggccgcgtgc actgccccgc tcaagcaa at cgctatcaac
60
gctggtcttg agggcggcgt cgtggctgag aaggctcgtg gtctgccccgc aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggttagagg ccggcatcat tgaccgcggc
180
aaggtagacc gttcggctct gcagaacgcc gcgtccatcg cggccctgtt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cggatgatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac tttgccccag gc
382

```

<210> 2460
 <211> 110
 <212> PRT
 <213> Homo sapiens

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<400> 2460
Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1          5          10          15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
20          25          30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
35          40          45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
50          55          60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65          70          75          80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
85          90          95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
100          105          110

```

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc
 60
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca
 120
 cgatgtggta ttcgcagtcg cggatacgct gcaacacacc tacaccaat tgcgcgacgg
 180
 ctggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac
 240
 ggctggaaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcatca cctgtacttc
 300
 atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctggtg
 360
 gtcgcccggg acaaacagga agccaagcgc aaggggcagc ggcaaagtgt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctggtg
 480
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccggt gagcgccaag
 60
 ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
 120
 ccctatggcg aaaccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
 240
 accttgggca ttgccttcct gacgacgacg ctggcgtttc tgctcgggtg tttgagcggg
 300
 ttggtcgcgg cgatcaaggg cggttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
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 60
 atgaccagag gctggcgggc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggg gctgttggct
 180
 gggatgatgga taccggctgc cagagatggc tcagggtgcca gctgctgggc tatctcaggc
 240

actggctgct gggctatctc gggtgccggc tgctgggcta tctcaggcgc tggctgctgc
 300
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgcaac tgggctctgg gcactcactg cactcgggct
 420
 tttccatctc cgac
 434

<210> 2466
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 2466
 Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile
 1 5 10 15
 Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile
 20 25 30
 Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp
 35 40 45
 Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu
 50 55 60
 Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro
 65 70 75 80
 Ser Pro

<210> 2467
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 2467
 atggactcca cgggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag
 60
 gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggccggtct ccagttcccc
 120
 gtcggcgcca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
 180
 gccccgtct acctcgccgc tgtcctcgaa tacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gtttctggcg
 300
 atccgg
 306

<210> 2468
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 2468
 Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

1		5		10		15									
Ala	Gly	Arg	Lys	Val	Gly	Gly	Pro	Arg	Lys	Lys	Ser	Val	Ser	Arg	Ser
		20					25					30			
Val	Lys	Ala	Gly	Leu	Gln	Phe	Pro	Val	Gly	Arg	Ile	Gly	Arg	Tyr	Leu
		35					40					45			
Lys	Lys	Gly	Arg	Tyr	Ala	Gln	Arg	Val	Gly	Thr	Gly	Ala	Pro	Val	Tyr
	50					55					60				
Leu	Ala	Ala	Val	Leu	Glu	Tyr	Leu	Ala	Ala	Glu	Val	Leu	Glu	Leu	Ala
65					70					75				80	
Gly	Asn	Ala	Ala	Arg	Asp	Asn	Lys	Lys	Thr	Arg	Ile	Ile	Pro	Arg	His
			85						90				95		
Val	Leu	Leu	Ala	Ile	Arg										
			100												

<210> 2469

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2469

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gccggcgtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatgggtcaaa ggcatggaga tgaggaagag
180
gggaccagag cagaggggtca ggttggaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcatctata
360
agaataaaac tttatttcat agagttattg tatgggtcaa aataggatat aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2470

Met	Ala	Ser	Leu	Lys	Pro	Ala	Leu	Pro	Trp	Pro	Arg	Lys	Leu	Cys	Arg
1				5					10				15		
Thr	Asp	Glu	Ile	Ser	Ala	Gly	Thr	Cys	Ser	Gln	Val	Gly	Phe	Gly	Leu
		20						25				30			
Leu	Gly	Arg	Arg	Glu	Arg	Ala	Phe	Lys	Gly	Gln	Gly	Gln	Ser	Met	Val
		35					40					45			
Lys	Gly	Met	Glu	Met	Arg	Lys	Arg	Gly	Pro	Glu	Gln	Arg	Val	Arg	Leu
	50					55					60				
Glu	Ser	Glu	Leu	Gly	Ser	Ile	Cys	Lys	Gly	Ala	Asp	Val	Pro	Gly	Lys

```

65          70          75          80
Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly
          85          90          95
Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser
          100          105          110
Ala His Leu
          115

```

```

<210> 2471
<211> 779
<212> DNA
<213> Homo sapiens

```

```

<400> 2471
tggccatcct ccgtgacatg tacacttcca atatgccggt gtttgagccg ttcatagatc
60
ctcacatggt ggcccttgac ttctttcaca gtgaggacct ctgcttcatg aggctcataa
120
gaagaggagc taaggactat tttgtcatgg gggcgccaat ccactgcac tttactata
180
attctctcat ttcttgaggc aatatcagct ccaagatgtg tccaggagtt cttaggataa
240
gcactgtaaa gatgaacttt ccataaacc ccaattgttc ctgggtcaat atgaattcca
300
ttcatacggt cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
360
ttttctaagg gatttttctaa agtaccaact ttcagctccc cgcttgcaat gaccatgcat
420
gccacactca gaacattgct tctgtccaca gggaagtcta aggtcccat cacatacagc
480
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctggtgggta aaatgagaac
540
gtcatcccca gggcctggaa tggatattgtt gtatcctccc cagccttctt caacaccttg
600
ccatgtttca gggagggacc attttaaaagc tgattcaggg gcagaggtag aagctgaaat
660
agttgggggc ataccttcct tcacccggag aatgacttga acttggcctt cacctaaaac
720
cagataggtg agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc
779

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<210> 2472
<211> 181
<212> PRT
<213> Homo sapiens

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```

<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
1          5          10          15
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
20          25          30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
35          40          45
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50	55	60
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg		
65	70	75
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys		80
	85	90
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly		95
	100	105
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val		110
	115	120
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu		125
	130	135
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His		140
	145	150
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His		155
	160	165
Val Thr Glu Asp Gly	170	175
	180	

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

```

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
60
cgcatctgct ccaaggccca cagctggcag ccgnnggcat ccagaacca taccggggca
120
ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggacccc
180
cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg
240
cagcggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc
300
ntgtccaagt ccnactgag gctgcggtg aagccaaagt cagtgaagac ggtgcaggct
360
gagctgagcc tcaactcttc cggggtgctg ctgcgaggagg gccgtgccac ggacgatgac
420
atgcagagtc tcgcaagcct catgagtgtg aagcctagtg atgtgggcaa cttggatgac
480
tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgagggc cggggtcga
540
gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
600
ggagggttac ccgggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac
660
tgcccaggca gtcccaacca acccagcagc ctcaattg
698

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<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
 1 5 10 15
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20 25 30
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35 40 45
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50 55 60
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65 70 75 80
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85 90 95
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
 100 105 110
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
 115 120 125
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
 130 135 140
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
 145 150 155 160
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
 165 170 175
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
 180 185 190
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
 195 200 205
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
 210 215 220
 Pro Asn Gln Pro Ser Ser Leu Asn
 225 230

<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
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 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgctgtca
 120
 ggctcggcca cgggctgccc gcccgcctgc gagtgctccg ccaggaccg cgctgtgctg
 180
 tgccaccgca agcgctttgt ggcagtcccc gagggcatcc ccaccgagac gcgcctgctg
 240
 gacctaggca agaaccgcat caaacgctc aaccaggacg agttcgccag cttcccgcac
 300
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac
 360
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
 420
 ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
 480

atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga ggttggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcacgtgcc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctccttcaag
 720
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 840
 gctgtgccct acctggccgt ccgccaccta gtctatctcc gcttcctcaa cctctcctac
 900
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc
 960
 cagctgggtgg gcgggcagct ggccgggtgg agccctgcct tccgcggcct caactacctg
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 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
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 1140
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca
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 cgcccgagtt tgtccagggg caaggagttc aaggacttcc ctgatgtgct a
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1				5					10					15	
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35					40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
		50				55				60					
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70				75					80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
				85					90					95	
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100						105				110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
		115					120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
		130					135					140			
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145					150					155				160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

				165				170					175				
Glu	Val	Gly	Asp	Asn	Asp	Leu	Val	Tyr	Ile	Ser	His	Arg	Ala	Phe	Ser		
			180					185					190				
Gly	Leu	Asn	Ser	Leu	Glu	Gln	Leu	Thr	Leu	Glu	Lys	Cys	Asn	Leu	Thr		
		195					200					205					
Ser	Ile	Pro	Thr	Glu	Ala	Leu	Ser	His	Leu	His	Gly	Leu	Ile	Val	Leu		
	210					215					220						
Arg	Leu	Arg	His	Leu	Asn	Ile	Asn	Ala	Ile	Arg	Asp	Tyr	Ser	Phe	Lys		
225					230					235					240		
Arg	Leu	Tyr	Arg	Leu	Lys	Val	Leu	Glu	Ile	Ser	His	Trp	Pro	Tyr	Leu		
			245					250						255			
Asp	Thr	Met	Thr	Pro	Asn	Cys	Leu	Tyr	Gly	Leu	Asn	Leu	Thr	Ser	Leu		
	260							265					270				
Ser	Ile	Thr	His	Cys	Asn	Leu	Thr	Ala	Val	Pro	Tyr	Leu	Ala	Val	Arg		
	275						280					285					
His	Leu	Val	Tyr	Leu	Arg	Phe	Leu	Asn	Leu	Ser	Tyr	Asn	Pro	Ile	Ser		
290						295					300						
Thr	Ile	Glu	Gly	Ser	Met	Leu	His	Glu	Leu	Leu	Arg	Leu	Gln	Glu	Ile		
305					310					315					320		
Gln	Leu	Val	Gly	Gly	Gln	Leu	Ala	Gly	Trp	Ser	Pro	Ala	Phe	Arg	Gly		
			325					330						335			
Leu	Asn	Tyr	Leu	Arg	Val	Leu	Asn	Val	Ser	Gly	Asn	Gln	Leu	Thr	Thr		
		340						345					350				
Leu	Glu	Glu	Ser	Val	Phe	His	Ser	Val	Gly	Asn	Leu	Glu	Thr	Leu	Ile		
	355						360					365					
Leu	Asp	Ser	Asn	Pro	Leu	Ala	Cys	Asp	Cys	Arg	Leu	Leu	Trp	Val	Phe		
	370					375				380							
Arg	Arg	Arg	Gly	Leu	Gln	Thr	Ser	Thr	Gly	Ser	Ser	Pro	Arg	Ala	Pro		
385					390					395					400		
Arg	Pro	Ser	Leu	Ser	Arg	Gly	Lys	Glu	Phe	Lys	Asp	Phe	Pro	Asp	Val		
			405					410						415			

Leu

<210> 2477

<211> 548

<212> DNA

<213> Homo sapiens

<400> 2477

nagactgcga tcagacgcgc gtgccagct gaaccagggtg cgtgagaagg ctgccttcag
60

gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120

aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcggcc
180

ctgtctctgg ccgtgaccat ggaccctctg gagacccta tcaaggatgg catcctctac
240

cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300

ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360

gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgctg
420

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc
 480
 ttcttgetca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg
 540
 atggggccc
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1				5				10					15		
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
			20					25					30		
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
			35				40					45			
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50					55					60				
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65					70					75					80
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
				85					90					95	
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100					105					110		

Gly

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat
 60
 ttccggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc
 120
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc
 240
 aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgctac
 300
 tctaactcct ggtatcgtga atat
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
 1 5 10 15
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
 20 25 30
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
 35 40 45
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
 50 55 60
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
 65 70 75 80
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
 85 90 95
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
 100 105

<210> 2481

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2481

gcgttcacta acgcttcaac aaactcttac aagcgtcttg ttcctgggtt cgaagcacct
 60
 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca
 120
 agccctaaag gcaagcgtat tgaagctcgt ttccctgatc caaccgctaa cccataccta
 180
 gcattttcag ctatgttgat ggctggatc gatggatca aaaacaagat tcacctggc
 240
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
 300
 gttgctagca gcttagaaga agcgcttaag tgcctagatc aagaccgtga gttcttgact
 360
 caaggtggcg ttttctctga cgacatgatc gatgcttaca tcgctcttaa agcagaagaa
 420
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
 480
 gctt
 484

<210> 2482

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1 5 10 15
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
 20 25 30
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
 35 40 45
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
 50 55 60

```

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
65          70          75          80
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
      85          90          95
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
      100         105         110
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
      115         120         125
Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
      130         135         140
Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
145          150          155

```

<210> 2483
 <211> 477
 <212> DNA
 <213> Homo sapiens

```

<400> 2483
acgcgtgtta gccaaatctt ggttcctccc gttctctcct tacccgagcc tgaggccctt
60
ctggagaaca ggcagcctct gaggaaacct ctgatccccg atcagccacc ccacgcctg
120
cgtccccagc cgttcctccc tggccttggt ccccttccc tgtgaaggag agaacagttt
180
cggtcggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccacctga
240
aatggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgcctt ccacagagga
300
cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
360
aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
420
gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
477

```

<210> 2484
 <211> 130
 <212> PRT
 <213> Homo sapiens

```

<400> 2484
Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
1          5          10          15
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
      20          25          30
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
      35          40          45
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
      50          55          60
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
65          70          75          80
Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
      85          90          95

```

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485
 <211> 608
 <212> DNA
 <213> Homo sapiens

<400> 2485
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc
 60
 aagacccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
 120
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag
 180
 ctagctggca ccatactgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac
 240
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
 300
 tctggcgagt tcccgggaagt ctctgcctgt ggtaccgccg cggttgtcac accgatcggc
 360
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaat gaccacgatg
 420
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccatggctgg
 480
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca
 540
 cgatcgggct acgacgggtgt cgatgacaat gtcttgccgc tggaaggttt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 2486
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

```

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
      100      105      110
Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
      115      120      125
Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
      130      135      140
Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
145      150      155      160
Leu Lys Arg Val Cys
      165

```

<210> 2487
 <211> 339
 <212> DNA
 <213> Homo sapiens

```

<400> 2487
nncccctcag gagagcagcc catggaaggt cccccccaag gggcccctga gagccctgac
60
agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag
120
aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc
180
cagctgggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg
240
gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
300
accttggtaa ggctgctgga cattgaagag gctgtgcac
339

```

<210> 2488
 <211> 113
 <212> PRT
 <213> Homo sapiens

```

<400> 2488
Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
1      5      10      15
Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
      20      25      30
Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
      35      40      45
Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
      50      55      60
Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
65      70      75      80
Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
      85      90      95
Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
      100      105      110
His

```

<210> 2489

<211> 594
 <212> DNA
 <213> Homo sapiens

<400> 2489
 nacgcgttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctatct
 60
 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc
 120
 ctgggcttca tggtagacct cgcgatcgga ggcgatgacc gcgtactgct ggccatcccc
 180
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctacttcca caacgtgatc
 240
 atcggcgggc cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc
 300
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct ggttctggat ctcgggcttc
 360
 ttcgtcgcgt tcatgccgct ctatgcactg ggtttcatgg gcatgaccgc ttgtttgaac
 420
 gcccccccca cccctgagtg ggtcccgta cgtacggtt ccatggtcgg tgcactgatg
 480
 atcgctgtcg gtatcgctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag
 540
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg
 594

<210> 2490
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 2490
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly
 1 5 10 15
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg
 20 25 30
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala
 35 40 45
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe
 50 55 60
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile
 65 70 75 80
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe
 85 90 95
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala
 100 105 110
 Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr
 115 120 125
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr
 130 135 140
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met
 145 150 155 160
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 2491
 acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc
 60
 actacgttgt tgcttgggtct attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttgcag tgttcgaaag cggaactgta ttccgcgcgc tcaactccggc tgcggcacgc
 180
 cgtcccgggtg tcgacgagcg cccctccgat gaagtccttg ccgagatoga cgcgccttg
 240
 ccagcccagc cgcgcgatgct cgcggccgtg atctgtggca gctggctgcc cgatcgctgg
 300
 gatggagagt cgggtcaaggc tgactggcga cacgctgtgc tggtcgcca gaaggctgct
 360
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggctccatg gcatcccggt
 420
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc
 480
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat
 540
 gctttggtag cctgcgctcc gagcgggtggt gaggtcatgg ttatttcaag gt
 592

<210> 2492
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 2492
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
 1 5 10 15
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

```

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
 130                      135                      140
Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
145                      150                      155                      160
Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
                      165                      170                      175
Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
                      180                      185                      190
Met Val Ile Ser Arg
                      195

```

```

<210> 2493
<211> 418
<212> DNA
<213> Homo sapiens

```

```

<400> 2493
acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tggcgccttc aggagcagac
60
ccccacacct atgagccgtc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg
120
ctatcgaact acctcatgct cgaacctcat tcggtcatca agaccatcga ctcttcctta
180
cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg
240
atcccgtcgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc
300
aagggcgcca ggcgggggagc cgaccgtctt tctcgggtct acctccagct gacgtcgggtg
360
gaggggcctg gggacttcac tgccatatatc actgggacct ttggtcgacc tcagatct
418

```

```

<210> 2494
<211> 139
<212> PRT
<213> Homo sapiens

```

```

<400> 2494
Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
1      5      10      15
Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
20     25     30
Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
35     40     45
Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
50     55     60
Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
65     70     75     80
Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
85     90     95
Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
100    105    110
Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
115    120    125

```

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
 130 135

<210> 2495
 <211> 1478
 <212> DNA
 <213> Homo sapiens

<400> 2495
 nnggcctggc ccagttgcac cagcagcgct gcggacactc ggggcggcag tcggtctgtc
 60
 agtcctcccg ccaggtcccg cggcccgcac ctgcgcgccg cacctgcagc tccgcacctg
 120
 cggccagtgc ctactgcctt ctcttgccgc ccgcacctgc agccccgcac ctgcgccttg
 180
 cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacaag
 240
 gacgtcaaca cctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc
 300
 gagttgacct agctgctcaa ctgcctctgc acagcagtca aagccatctc ttcggcgggtg
 360
 cgcaaggcgg gcatcgcgca cctctatggc attgctgggt ctaccaacgt gacagggtgat
 420
 caagttaaga agctggacgt cctctccaac gacctgggtta tgaacatggt aaagtcattc
 480
 tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
 540
 aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
 600
 cttgtgtccg ttggaaccat ttttggcatc tatagaaaga aatcaactga tgagccttct
 660
 gagaaggatg ctctgcaacc aggcgggaac ctggtggcag ccggctacgc actgtatggc
 720
 agtgcacca tgctggctct tgccatggac tgtgggggtca actgcttcat gctggaccog
 780
 gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc
 840
 tacagcetta acgagggcta cgccaaggac tttgaccctg ccgtcactga gtacatccag
 900
 aggaagaagt tccccccaga taattcagct ccttatgggg ccggtatgt gggctccatg
 960
 gtggctgatg ttcatcgcac tctggtctac ggagggatat ttctgtacct cgctaacaag
 1020
 aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
 1080
 gagaaggctg ggggaatggc caccactggg aaggaggccg tgttagacgt cattcccaca
 1140
 gacattcacc agagggcgcc ggtgatcttg ggggtccccg acgacgtgct cgagttcctg
 1200
 aagggtgatg agaagcactc tgcccagtga gcacctgccc tgccctgcac cggagaattg
 1260
 cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt
 1320


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<210> 2496
<211> 338
<212> PRT
<213> Homo sapiens
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1793

Ala Gln

325 330 335

<210> 2497
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2497
 acgcgtgtct tggccggtga aacccttccc gcagcagggt cagtacgtcg caccggcgag
 60
 cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcg gagggcaagg
 120
 atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
 180
 atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa
 240
 gaccgtctcg tcgcggccgg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg
 300
 aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag
 360
 cgtcgtcgcg tcgagctggc ggcacatctc ttttcggga
 399

<210> 2498
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2498
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
 1 5 10 15
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
 20 25 30
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
 35 40 45
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
 50 55 60
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
 65 70 75 80
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
 85 90 95
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
 100 105 110
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
 115 120 125
 Ile Leu Phe Ser Gly
 130

<210> 2499
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2499

nggccgggcg aagacccggt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa
 60
 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
 120
 tggatcacca tcctgcgcaa gcgcgacaac tttcgcaaag ctttcgacga tttccagccc
 180
 gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
 240
 gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc
 300
 atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac
 348

<210> 2500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2500

Xaa	Pro	Gly	Glu	Asp	Pro	Phe	Tyr	Met	Ala	Tyr	His	Asp	Thr	Glu	Trp
1				5					10					15	
Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
			20					25					30		
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
		35					40					45			
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50					55					60				
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
65					70					75				80	
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
				85					90					95	
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
		100						105						110	
Asp	Phe	Val	Asp												
															115

<210> 2501

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2501

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 60
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 120
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggatatgg
 180
 ctttcaagag tcaaacaatt ttactggtgc atcatttcca tttattcttt ctcttttgca
 240
 taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag
 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacatca aaaaaatcct
 360
 taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
 480
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca
 540
 gatgtgaaat gctgaatcat taatcacag
 569

<210> 2502
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2502
 Met Ile Ala Gly Val Arg Tyr Gly Phe Gln Glu Ser Asn Asn Phe Thr
 1 5 10 15
 Gly Ala Ser Phe Pro Phe Ile Leu Ser Leu Leu His Asn Lys Thr Thr
 20 25 30
 Leu Lys Ile Leu Pro Trp Leu Val Arg Asp Asn Ser Ser Leu Glu Ser
 35 40 45
 Arg Phe Tyr Ser Phe Asn Ser Leu Lys Arg Cys Val Leu Ile Tyr Ile
 50 55 60
 Lys Lys Ile Leu Lys Gly Ile Lys Tyr Ala Lys Asn Cys Gln His His
 65 70 75 80
 Arg Leu Pro Leu Val Ala Ser Gly Ile Leu Leu Ser Phe His Leu Ile
 85 90 95
 Phe Lys Gly His
 100

<210> 2503
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2503
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 60
 aaggccttgc tacctcagca gtctacagc ttggcccagc cgctgtattc tccagtctgc
 120
 accaatgggg agcgttttct ctacctgccg ccacctcact acgtcgggtcc ccacatccca
 180
 tcgtccttgg catcaccat gaggtctctg acaccttcgg cctccccagc catcccgct
 240
 ctcgctcatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
 300
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
 360
 aaggcgggtca ccagtggcct gccgggggac acagctctcc tgttgcccc ctcacgcgt
 419

<210> 2504

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 2504

Met	Tyr	Lys	Ala	Leu	Leu	Pro	Gln	Gln	Ser	Tyr	Ser	Leu	Ala	Gln	Pro
1				5					10					15	
Leu	Tyr	Ser	Pro	Val	Cys	Thr	Asn	Gly	Glu	Arg	Phe	Leu	Tyr	Leu	Pro
			20					25					30		
Pro	Pro	His	Tyr	Val	Gly	Pro	His	Ile	Pro	Ser	Ser	Leu	Ala	Ser	Pro
		35					40					45			
Met	Arg	Leu	Ser	Thr	Pro	Ser	Ala	Ser	Pro	Ala	Ile	Pro	Pro	Leu	Val
	50					55					60				
His	Cys	Ala	Asp	Lys	Ser	Leu	Pro	Trp	Lys	Met	Gly	Val	Ser	Pro	Gly
65					70					75				80	
Asn	Pro	Val	Asp	Ser	His	Ala	Tyr	Pro	His	Ile	Gln	Asn	Ser	Lys	Gln
			85						90					95	
Pro	Arg	Val	Pro	Ser	Ala	Lys	Ala	Val	Thr	Ser	Gly	Leu	Pro	Gly	Asp
			100						105				110		
Thr	Ala	Leu	Leu	Leu	Pro	Pro	Ser	Arg							
			115					120							

<210> 2505
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 2505

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ccgctcgtgt tgggtgccgtt ggctcgggtc accggcgatc ggcgtctgat gggccaatgg
120
acgaatgggc gtgtcatggc cgccatcgcg tggatcgtcg tggcagcagt ctcggctctc
180
aacgtgggtc tcgtcgtcga gacggtcatg ggtgcatgat ccttgagggc agttttcttg
240
cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga
300
cctctgcccc cgagctagcc aacgatttgg cactgcatt tcgcgggtac cctgctggag
360
tggcgatcct cacgacgatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg
420
cgtcgggtgc agtcgtcccg gctgttgtgt cggtgtcgtt gggtaatggg tcgacgacct
480
tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcg
540

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<210> 2506
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2506

Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

1		5		10		15									
Ser	Met	Gly	Leu	Pro	Leu	Val	Leu	Val	Pro	Leu	Ala	Arg	Phe	Thr	Gly
		20					25					30			
Asp	Arg	Arg	Leu	Met	Gly	Gln	Trp	Thr	Asn	Gly	Arg	Val	Met	Ala	Ala
		35				40					45				
Ile	Ala	Trp	Ile	Val	Val	Ala	Ala	Val	Ser	Ala	Leu	Asn	Val	Val	Leu
	50				55						60				
Val	Val	Glu	Thr	Val	Met	Gly	Ala								
65					70										

<210> 2507

<211> 922

<212> DNA

<213> Homo sapiens

<400> 2507

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 agcttcatgc ccccaggaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg
 120
 acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcacccggcc gttcacctgc
 180
 ttccactggc acttctctcaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
 240
 ttcaactaca gccccgacgt gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc
 300
 gacggcgacg agtgctcccta cctgcaccgg acgacggggg acacagaacg caagtaccac
 360
 ctgcgttact acaaaacagg aacctgcac cagcagacag acgcacgtgg ccaactgcgtg
 420
 aagaatgggc tgcactgtgc cttcgcgcac gggcccatg acctccgctc ccctgtctac
 480
 gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
 540
 agcatagagg gccagtcggc tggggctgcg agccatgcca tgatagaaaa gatcctcagc
 600
 gaggagcctc ggtggcaaga gactgcttat gtgctgggga actataagac ggagccttgc
 660
 aagaagcccc cgcggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
 720
 gaccggcggc ggagcccccg gaagcacaaa tacaggctgt ctccatgtcc aaacgtcaag
 780
 cacggggatg agtggggaga ccctggcaag tgtgagaacg gagacgctg ccagtactgc
 840
 cacaccgcga ccgagcagca gttccacccc gagatctaca agtccaccaa gtgcaacgga
 900
 aggggggggg gggtagaggga gg
 922

<210> 2508

<211> 278

<212> PRT

<213> Homo sapiens

<400> 2508

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Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
 1           5           10           15
Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
      20           25           30
His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg
      35           40           45
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
      50           55           60
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
      65           70           75           80
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
      85           90           95
Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
      100          105          110
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
      115          120          125
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
      130          135          140
Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
      145          150          155          160
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
      165          170          175
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
      180          185          190
Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
      195          200          205
Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
      210          215          220
Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
      225          230          235          240
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
      245          250          255
Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
      260          265          270
Gly Gly Gly Val Arg Glu
      275

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<210> 2509

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2509

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gccggccttg acctgggccc ggcgatggct ccacggcaag gtccaataact ccgtgcgctt
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gtggcgctgg acttcgtcga tgcccgcgag gttttgctgc ccgcgaccat tggactggac
120
gttcatgaac ggggtggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga
180
cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
240
caccgctccc agcgggaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc
300

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gtaacgacgg gtgacctga actcggggct tcaaagtctt ctgctgtg
348

<210> 2510
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2510
Met Ala Pro Arg Gln Gly Pro Ile Leu Arg Ala Leu Val Ala Leu Asp
1 5 10 15
Phe Val Asp Ala Arg Glu Val Leu Leu Pro Ala Thr Ile Gly Leu Asp
20 25 30
Val His Glu Arg Val Glu Pro Gly Lys Thr Glu Thr Gln Pro Ile Leu
35 40 45
Gly Asp Ala Gly Arg Gln Val Ala Glu Gly Lys His Val Asp His Val
50 55 60
Arg Thr Asp Thr Thr Asp His Gly His Arg Ser Gln Arg Asn Leu Val
65 70 75 80
Asp Leu Ala Pro Gly Leu Val Arg Arg Val Ala Val Val Thr Thr Gly
85 90 95
Asp Leu Glu Leu Gly Ala Ser Lys Ser Ser Ala Val
100 105

<210> 2511
<211> 663
<212> DNA
<213> Homo sapiens

<400> 2511
nnacgcgtgt gggaccatat caggggagcc cgatggttct caggtaaggg ccgggggtggt
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tccctgacta ggctgctgtc gttggctccc gtcgtcaacg agcaagatct gcaagtgtc
120
cctgtcatcg cacacgtcgg ttatccgcag gccgccgacg agtattacca gttgctttta
180
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt
240
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg tatcctctc
300
gaggaactc ccatcgccat ggatggatcg tggcagctgc atcgccgctg agcggcccct
360
gagccagttc ggttcgctaa gcgcttcggt ggtgagcaat cgaacacctc gatcatgggtg
420
ggcgacgcca tcatcatcaa aatgttccgc cgctggagc ccggcgacaa ccttgacatc
480
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt
540
atgtccggac agatccccgc tgaggaacac atcccggctg atctagctat gatcattgag
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aggttgccac agccccgga tggctgggaa ctcatcactg ccaaggcagt cgatctcgtc
660
gac
663

<210> 2512
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2512
 Xaa Arg Val Trp Asp His Ile Arg Gly Ala Arg Trp Phe Ser Gly Lys
 1 5 10 15
 Gly Arg Gly Gly Ser Leu Thr Arg Leu Leu Ser Leu Ala Pro Val Val
 20 25 30
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr
 35 40 45
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 75 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 155 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
 180 185 190
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
 195 200 205
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp
 210 215 220

<210> 2513
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 2513
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 60
 cagcttgacc tggccaagaa ccgcctctat caggccattc agagagctga tgacatcttg
 120
 gacctgaagt tctgcatgga tggagttcag actgctttga ggagtgaaga ttatgagcag
 180
 gctgcagcac atattcatcg ctacttgtgc ctggacaagt cggtcattga gctcagccga
 240
 cagggcaaag agggtcagca tccgaaactg gagcatgatt gatgccaaacc tgaaattgct
 300
 gcaggaagct gagcaacgtc tcaaagccat tgtggcagag aagtttgcca ttgccaccaa
 360

ggaagggtg

368

<210> 2514

<211> 93

<212> PRT

<213> Homo sapiens

<400> 2514

Leu	Ala	Gly	Met	Ile	Thr	Phe	Thr	Cys	Asn	Leu	Ala	Glu	Asn	Val	Ser
1				5					10					15	
Ser	Lys	Val	Arg	Gln	Leu	Asp	Leu	Ala	Lys	Asn	Arg	Leu	Tyr	Gln	Ala
			20					25					30		
Ile	Gln	Arg	Ala	Asp	Asp	Ile	Leu	Asp	Leu	Lys	Phe	Cys	Met	Asp	Gly
		35					40					45			
Val	Gln	Thr	Ala	Leu	Arg	Ser	Glu	Asp	Tyr	Glu	Gln	Ala	Ala	Ala	His
	50					55					60				
Ile	His	Arg	Tyr	Leu	Cys	Leu	Asp	Lys	Ser	Val	Ile	Glu	Leu	Ser	Arg
65					70					75					80
Gln	Gly	Lys	Glu	Gly	Gln	His	Pro	Lys	Leu	Glu	His	Asp			
				85					90						

<210> 2515

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2515

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agatccttaag ggccccagga atttgttttg ttttcctttt taactcccca ggtaattatg
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gctcatcctg gaccagaccc ttcctacccc tccaactccc caacaactgg gcaattggaa
120
tatcagtcca tccctaaaag ccaaccaggc tctcccgagg gaggcaggaa atccctgctc
180
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct
240
ctgggtgcag gtgggcagac aatgggcca cacccccct cagccccgct ccagtatcag
300
cattccagac ccaccacct gggcccttg tcaccgggag acctcacgcg t
351

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<210> 2516

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2516

Met	Ala	His	Pro	Gly	Pro	Asp	Pro	Ser	Tyr	Pro	Ser	Asn	Ser	Pro	Thr
1				5					10					15	
Thr	Gly	Gln	Leu	Glu	Tyr	Gln	Ser	Ile	Pro	Lys	Ser	Gln	Pro	Gly	Ser
			20					25					30		
Pro	Glu	Gly	Gly	Arg	Lys	Ser	Leu	Leu	Pro	Pro	Ser	Pro	Thr	Gly	Asn.
		35					40					45			
Ala	Ala	Gly	Gly	Leu	Arg	Glu	Ala	Thr	Gln	Trp	Gly	Ala	Leu	Gly	Ala

50		55		60	
Gly Gly Gln Thr Met	Gly Gln His Thr Pro	Ser Ala Pro Leu Gln Tyr			
65	70	75	80		
Gln His Ser Arg Pro	Thr His Leu Gly Pro	Trp Ser Pro Gly Asp Leu			
85	90	95			
Thr Arg					

<210> 2517
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 2517
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 ggaggtggcc agtgagtcag gaggcggggg ggggggctag ggcttcccca ggggtcagga
 120
 cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg
 180
 aggccacaca ttccctgggg actgagctcc aaggtgctgg gtccctgagc aggaagcggc
 240
 cagtgttgag tgggcagtgt ctactccag cccctccttc ccaggccagt tcttctcatc
 300
 tccctcagtc tttcccaagc aggcctcat ctacaggga gacctgactg gctagc
 356

<210> 2518
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2518
 Met Gly Ala Glu Gly Glu Asp Lys Arg Arg Trp Pro Val Ser Gln Glu
 1 5 10 15
 Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln
 20 25 30
 Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
 35 40 45
 Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
 50 55 60
 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
 65 70 75 80
 Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
 85 90 95
 Pro Ser Ser Thr Gly Gln Thr
 100

<210> 2519
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 2519

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 60
 cgacagccct ggtgccaagc cctgtctgag cccaccagg aggaagcgcg tgctggctgc
 120
 tctccatctg ctctgggact ctggcctgct gcttcctctg cctgccactc cccaaccccg
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 300
 acacctcctt gcaggactca tggctaccgt gggctcgcac caccagcctc cccatgcgtt
 360
 ttctgcctc tgcttttgct caatctgctc aatgacagaa acgcgacaac agagggcact
 420
 ttctccaaac ccagctctcc ctcgaggctc ccattctgct gctcacgctg aggccactct
 480
 accctgccct ccgcagctca caggcagacc tggagcccag tgactacagg gttggcctcc
 540
 tcatcttgcc accactcaca atgcccagca gtgttaaaat ccggcaggat gcaccgcgtt
 600
 gggaagcagt ccccaaagca gaatcgtcac cacatctgaa tagtttctgc catccactg
 660
 acaggccagc atctaaaaga gatgtgcgct gagcgtccgt tatgtggtgg cgtcgctgtg
 720
 gtttcttaac cagaacgcaa aatcctgtga ccaggattat caccggctcg tttcatacat
 780
 gagacggggg aagccaaagt aaccactcag gccacagcag aaaaacgcgt
 830

<210> 2520

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2520

Met	Ser	Pro	Ala	Arg	Arg	Cys	Leu	Gly	Leu	Gly	Pro	Glu	Asn	Phe	Gly
1				5				10						15	
Glu	Glu	Val	Gly	Leu	Leu	Cys	Asn	Cys	Leu	Val	Pro	Phe	Lys	Val	Ile
			20				25						30		
Leu	Pro	Cys	Trp	Gly	Arg	Cys	Ser	Ser	Ser	Phe	Gln	Arg	Arg	Lys	Arg
		35				40						45			
Gly	Trp	Gly	Val	Ala	Gly	Arg	Gly	Ser	Ser	Arg	Pro	Glu	Ser	Gln	Ser
	50				55					60					
Arg	Trp	Arg	Ala	Ala	Ser	Thr	Arg	Phe	Leu	Leu	Val	Gly	Leu	Arg	Gln
65				70				75						80	
Gly	Leu	Ala	Pro	Gly	Leu	Ser	Gly	Lys	Arg	Glu	Glu	Glu	Leu	Arg	Leu
			85				90						95		
Arg	Gly	Ala	Val	Leu	Pro	Arg	Arg	Leu	Thr	Gly					
			100					105							

<210> 2521

<211> 4291

<212> DNA

<213> Homo sapiens

<400> 2521

ctctctctct ttcgggcgga gtcgccacc actgccagcc cagcgctggg gggacctgct
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ccaggctgta gccgcaggac cccaccaccc cccatggctc ccctggcctt ggtgggggtc
120
acactcctcc tggcggtctc cccatgctcc ggggcagcca cccaacccc ctccctgcg
180
cctccccgg ccaatgacag cgacaccagc acagggggct gccaggggtc ctaccgctgc
240
cagccggggg tgctgctgcc cgtgtgggag cccgacgacc cgtcgctggg tgacaaggcg
300
gcacgggcag tgggtgtactt tgtggccatg gtctacatgt ttctgggagt gtccatcatc
360
gccgaccgtt tcatggcggc catcgaggct atcacgtcaa aagagaagga gatcaccatc
420
accaaggcca acggtgagac cagcgtgggc accgttcgca tctggaatga gacggtgtcc
480
aacctcacgc tcatggccct gggctcctcc gcacctgaga tctgctgtc agtcatcgaa
540
gtctgcggcc acaacttcca ggcgggtgag ctgggcccag gcaccatcgt gggcagcgct
600
gccttcaaca tgtttgtggt catcgccgtg tgcactctacg tcatcccagc cggcgagagc
660
cgcaagatca agcacctgag agtcttcttt gtcactgcct cttggagcat cttgcctat
720
gtctggcttt atctcatcct tgctgttttt tccccggtg tggccagggt gtgggaggcg
780
ctgctgaccc tgggtcttct cccggtgtgc gtggtattcg cctggatggc cgacaagcgg
840
ctgctcttct acaagtacgt gtacaagcgc taccgcaccg acccacgcag cggcatcatc
900
ataggcgccg agggcgaccc cccgaagagc atcgagctgg acggcacggt cgtgggcgcc
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1020
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<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

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His	Leu	Arg	Val	Phe	Phe	Val	Thr	Ala	Ser	Trp	Ser	Ile	Phe	Ala
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Val	Trp	Leu	Tyr	Leu	Ile	Leu	Ala	Val	Phe	Ser	Pro	Gly	Val	Val
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Val	Trp	Glu	Ala	Leu	Leu	Thr	Leu	Val	Phe	Phe	Pro	Val	Cys	Val
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Gly	Asp	Pro	Pro	Lys	Ser	Ile	Glu	Leu	Asp	Gly	Thr	Phe	Val	Gly
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Glu	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Leu	Gly	Pro	Gly	Pro	Ala	Glu
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Ala	Asn	Tyr	Tyr	Ala	Leu	Leu	His	Gln	Gln	Lys	Ser	Arg	Ala	Phe
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Arg	His	Ala	Ala	Asp	Ala	Ser	Arg	Arg	Ala	Ala	Pro	Ala	Glu	Gly
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Cys	Gln	Gly	Gly	Glu	Gly	Asn	Ser	Thr	Phe	Tyr	Val	Asp	Tyr	Arg
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Glu	Asp	Gly	Ser	Ala	Lys	Ala	Gly	Ser	Asp	Tyr	Glu	Tyr	Ser	Glu
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Thr	Leu	Val	Phe	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Glu	Leu	Arg	Ile
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 <211> 392
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 <213> Homo sapiens

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 <211> 130
 <212> PRT
 <213> Homo sapiens

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 Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
 50 55 60
 Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
 65 70 75 80
 Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
 85 90 95
 Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
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 Arg Xaa
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<210> 2525
 <211> 378
 <212> DNA
 <213> Homo sapiens

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<210> 2526

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2526

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			20					25					30		
Arg	Gly	Arg	Gln	Asp	Val	Gly	Gln	Arg	Arg	Ala	Pro	Xaa	Met	Ile	His
			35				40					45			
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
	50					55					60				
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
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Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
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<211> 305

<212> DNA

<213> Homo sapiens

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<211> 101
<212> PRT
<213> Homo sapiens

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Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
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Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val
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Ala Ile Pro Pro Arg
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<212> DNA
<213> Homo sapiens

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<210> 2530
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Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
                35                40                45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
                50                55                60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
65                70                75                80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
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Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
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Asp Arg Asp Pro Pro Arg Gly Asp Ala
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<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

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396

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<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

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Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
35                40                45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
50                55                60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
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85                90                95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

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 <212> DNA
 <213> Homo sapiens

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<210> 2534
 <211> 96
 <212> PRT
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<400> 2534
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 35 40 45
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys
 50 55 60
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
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<210> 2535
 <211> 1904
 <212> DNA
 <213> Homo sapiens

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 1860
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaaag tact
 1904

<210> 2536

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2536

Met	Arg	Leu	Asn	Gln	Asn	Thr	Leu	Leu	Leu	Gly	Lys	Lys	Val	Val	Leu
1			5					10						15	
Val	Pro	Tyr	Thr	Ser	Glu	His	Val	Pro	Ser	Arg	Tyr	His	Glu	Trp	Met
			20					25					30		
Lys	Ser	Glu	Glu	Leu	Gln	Arg	Leu	Thr	Ala	Ser	Glu	Pro	Leu	Thr	Leu
		35					40					45			
Glu	Gln	Glu	Tyr	Ala	Met	Gln	Cys	Ser	Trp	Gln	Glu	Asp	Ala	Asp	Lys
		50				55					60				
Cys	Thr	Phe	Ile	Val	Leu	Asp	Ala	Glu	Lys	Trp	Gln	Ala	Gln	Pro	Gly
65					70					75				80	
Ala	Thr	Glu	Glu	Ser	Cys	Met	Val	Gly	Asp	Val	Asn	Leu	Phe	Leu	Thr
				85					90					95	
Asp	Leu	Glu	Asp	Pro	Thr	Leu	Gly	Glu	Ile	Glu	Val	Met	Ile	Ala	Glu
			100					105					110		
Pro	Ser	Cys	Arg	Gly	Lys	Gly	Leu	Gly	Thr	Glu	Ala	Val	Leu	Ala	Met
		115					120					125			
Leu	Ser	Tyr	Gly	Val	Thr	Thr	Leu	Gly	Leu	Thr	Lys	Phe	Glu	Ala	Lys
		130					135					140			
Ile	Gly	Gln	Gly	Asn	Glu	Pro	Ser	Ile	Arg	Met	Phe	Gln	Lys	Leu	His
145					150					155				160	
Phe	Glu	Gln	Val	Ala	Thr	Ser	Ser	Val	Phe	Gln	Glu	Val	Thr	Leu	Arg
				165					170					175	
Leu	Thr	Val	Ser	Glu	Ser	Glu	His	Gln	Trp	Leu	Leu	Glu	Gln	Thr	Ser
			180					185					190		
His	Val	Glu	Glu	Lys	Pro	Tyr	Arg	Asp	Gly	Ser	Ala	Glu	Pro	Cys	
		195					200					205			

<210> 2537

<211> 509

<212> DNA

<213> Homo sapiens

<400> 2537

acgcgttctc gtaaggacaa gcttgacgcc gaggtgcatg ccggtgaagg ccccccgagg
 60
 gatgtcatcg tgctgcggtt ttccggagcc atggcgaagc gtctgcctc agttatcctt
 120
 ccgctgctac tgctcgactc ccccgctcatt gcgtggtggc ccttctccgg ccctgacaac
 180

ctcgctcggg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttggg ctgcgaccac cagctggaga gccctagctg cagcagcttt ggatcaacat
 360
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg
 420
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgcg
 480
 cccggcatct ccgcatcgt catgtcgac
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55				60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65					70					75					80
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
			115				120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135					140				
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145					150					155					160
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
					165										

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

aagcttctac tgccgcgagc acgtcgtcca ccgtcgaggt catgggttcta gtttgccgcg
 60
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcgggt
 180

ggggtcccgca tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc
 240
 gtagtggcca atatgaccgc aatttcggga cgtcgcattg cagagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgcc ccaagatata cggcgaggatt tcgtcgcccg gtccattcgg
 360
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaactt gctcaacaag cgc
 453

<210> 2540
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2540
 Phe Ala Ala Ser Arg His Asp Pro Arg Ile Val Thr Trp Asp Asn Gly
 1 5 10 15
 Tyr Val Arg Phe Leu Asn Glu Gln Pro Asn Tyr Asp Leu Thr Tyr Asp
 20 25 30
 Asp Val Phe Met Ala Pro Asn Arg Ser Ser Val Gly Ser Arg Met Asn
 35 40 45
 Val Asp Leu Thr Ser Thr Asp Gly Leu Gly Thr Pro Leu Pro Leu Val
 50 55 60
 Val Ala Asn Met Thr Ala Ile Ser Gly Arg Arg Met Ala Glu Thr Ile
 65 70 75 80
 Ala Arg Arg Gly Gly Ile Ala Val Leu Pro Gln Asp Ile Pro Ala Asp
 85 90 95
 Phe Val Ala Arg Ser Ile Arg Arg Val Lys Asp Ala His Thr Arg Phe
 100 105 110
 Asp Thr Pro Val Thr Val Asn Pro Thr Thr Thr Val Gly Glu Ala Met
 115 120 125
 Asn Leu Leu Asn Lys Arg
 130

<210> 2541
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 2541
 accggtctcc cacggagttc tgtttctcga ggtactgcac tgtatacaac tctaaatgca
 60
 ccctgcatgg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc
 120
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct cccagaggaa
 180
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac
 240
 actattatgc tgtgcacaca tttctcata ttctgtgtag agagcacctc atttgtact
 300
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt
 420
 gcacagttct cactgtttctg cgtgcccage cctcacact ggacgcccac ctcacactct
 480
 tctgccaagg gagactttgg ttctcccctt cctgtgctg gctgtgctgg ccacagtcct
 540
 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2542
 Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe
 1 5 10 15
 Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu
 20 25 30
 Lys Ile Phe Ile Thr Arg Glu Thr Ala Trp Tyr Arg His Pro Ser
 35 40 45
 Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe
 50 55 60
 Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala
 65 70 75 80
 Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His
 85 90 95
 Ser Pro Leu His Ala Ser Ser Met Thr Arg
 100 105

<210> 2543
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2543
 cgcctgaagg gggcggggaa aatggaatgg gggggaaggg cgcggtggg gacatgctgg
 60
 aacgtgcca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta
 120
 ccgctcctga tgagattttt gtttttcct aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc
 240
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
 300
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc
 360
 aatggggccc agcaggcagc agtgctg
 387

<210> 2544
 <211> 122
 <212> PRT

<213> Homo sapiens

<400> 2544

```

Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
          20          25          30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35          40          45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
          50          55          60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65          70          75          80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85          90          95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115          120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

```

gcgattattt tcgtgctgcc cggacttatc atggtcggct ggtggtcagg tttcccgtac
60
tggaccaccc tcgtatctg tctagtcggc ggcacccctc gcgttatgta ctcgattccg
120
ctgcgtcggg cctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgca
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tgttgctgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

```

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20          25          30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35          40          45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50          55          60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

```

65              70              75              80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
              85              90              95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
              100              105              110

```

<210> 2547
 <211> 556
 <212> DNA
 <213> Homo sapiens

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<400> 2547
acgcgtgcac acacacacac gcaggcgtac acgctcacao gtgcacacac acatatgagt
60
ttccacaca tctcaccata tcaactttctc ttactttttt aaagacaggg cacttgcctt
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacao aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
240
caagtttgtt ttggaaagtg gacttaacgg tcaaagaaaa aggctggcc aacttcagag
300
agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggc ctcccttggt taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tatcagatca tctaga
556

```

<210> 2548
 <211> 106
 <212> PRT
 <213> Homo sapiens

```

<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1      5      10      15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
20     25     30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
35     40     45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
50     55     60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65     70     75     80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
85     90     95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
100    105

```

<210> 2549
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2549
 nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacggttggt
 60
 atcgatgata atgggtgctgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
 120
 gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
 180
 caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcgttgc tgataaagta
 240
 acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgtctg ggtatctgat
 300
 ggttctggtg aatttactat tgagacgata gataaagcga ctcgtggtac acgcattact
 360
 ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
 420
 acaaaaatatt ctgat
 435

<210> 2550
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2550
 Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
 1 5 10 15
 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
 20 25 30
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
 35 40 45
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
 50 55 60
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
 65 70 75 80
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
 85 90 95
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
 100 105 110
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
 115 120 125
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
 130 135 140
 Asp
 145

<210> 2551
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 2551

nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga
 60
 ggactccact tctggggacg cctgggttcgt tcgcccacca ggcttaggct acgctccatg
 120
 ctccccagc aatctctgtc tacacctcct gcggcgccct gccctcctcc gacccctttc
 180
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct
 240
 ccagcctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggacg
 300
 gcctctggac tgccaggctg ggttggggac caggggaacat cggctctactc aggtgtgagg
 360
 gggcaggtct ggctgcccc aaagttggct ccacctgga can
 403

<210> 2552

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2552

Xaa	Pro	Ala	Ser	Leu	Thr	Ser	Val	Ser	Pro	Pro	Arg	Gly	Arg	Leu	Ser
1				5					10					15	
Thr	Leu	Asn	Arg	Gly	Leu	His	Phe	Trp	Gly	Arg	Leu	Val	Arg	Ser	Pro
		20						25					30		
Thr	Arg	Pro	Arg	Leu	Arg	Ser	Met	Leu	Pro	Gln	Gln	Ser	Leu	Ser	Thr
		35					40					45			
Pro	Pro	Ala	Ala	Pro	Cys	Pro	Pro	Pro	Thr	Pro	Phe	Gln	Pro	Xaa	Ser
	50					55					60				
Pro	Pro	Thr	Pro	Ser	Glu	Lys	Gln	Pro	Gln	Ile	Pro	Glu	Val	Glu	Ala
65					70					75					80
Pro	Ala	Ser	Pro	Arg	Gly	Thr	Ser	Pro	Thr	Val	Phe	Trp	Glu	Pro	Leu
				85					90					95	
Trp	Pro	Gly	Thr	Ala	Ser	Gly	Leu	Pro	Gly	Trp	Val	Gly	Asp	Gln	Gly
		100						105					110		
Thr	Ser	Val	Tyr	Ser	Gly	Val	Arg	Gly	Gln	Val	Trp	Pro	Ala	Pro	Lys
		115					120						125		
Leu	Ala	Pro	Ser	Trp	Thr										
															130

<210> 2553

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2553

actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg
 60
 gagagataca gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
 120
 gcatcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg
 240
 gacctctctg gcccctgtcc tggtccacc ctcagctgct ggcaggtggg tcaccaggcc
 300
 tctgccccaa gaaactcctg caggcagctc tggacccct gtcttacaca ccttctcact
 360
 gagcctgcc gcatcccagn
 380

<210> 2554

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2554

Met	Lys	Gln	Arg	Leu	Glu	Arg	Tyr	Ser	Met	Gly	Gln	Gly	Ala	Leu	Gly
1				5					10					15	
Ala	Ser	Ser	Ser	Trp	Lys	Arg	Gln	Glu	Ala	Ser	Ser	Leu	Asp	Arg	Thr
			20					25					30		
Gly	Cys	Tyr	Trp	Val	Ser	Leu	Leu	Ser	Trp	Lys	Arg	Arg	Glu	Val	Cys
		35					40					45			
Leu	Ser	Gly	Gln	Gly	Leu	Leu	Arg	Ser	Thr	Gln	Gln	Gly	Gln	Gly	Gly
	50					55				60					
Arg	Asp	Pro	Pro	Gly	Pro	Cys	Pro	Gly	Ser	Thr	Leu	Ser	Cys	Trp	Gln
65					70				75					80	
Val	Gly	His	Gln	Ala	Ser	Ala	Gln	Arg	Asn	Ser	Cys	Arg	Gln	Leu	Trp
			85					90					95		
Thr	Pro	Cys	Leu	Thr	His	Leu	Leu	Thr	Glu	Pro	Ala	Ser	Ile	Pro	
			100					105					110		

<210> 2555

<211> 368

<212> DNA

<213> Homo sapiens

<400> 2555

ntccggatgg aaaagtaaag accagcaata gccataacg ccattaacac ataccatata
 60
 atgttggttaa tgctgcccgg tagttcgggtg gcattcttca tgggcaatag tttaatggga
 120
 gataacgcga ataatggtag tgctggttcta gtgctcacag acctgggtcac ccaaatagaa
 180
 ggatttatat cctcccatat cctcattttt gtgctcggtg gcctcggtcat tgtctttacc
 240
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat
 300
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctcgat
 360
 cacgcggn
 368

<210> 2556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1           5           10           15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
 20           25           30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
 35           40           45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
 50           55           60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
 65           70           75           80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
 85           90           95
Val Gly Leu Asp His Ala
          100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtgagccg
60
attgatgaga tgggcccagt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgcac cttacgcaaa gggtaggcaag atcgggtctct tcggtaggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1           5           10           15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
 20           25           30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
 35           40           45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
 50           55           60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

65					70					75				80	
Lys	Thr	Val	Leu	Ile	Gln	Glu	Leu	Ile	Arg	Asn	Ile	Ala	Thr	Glu	His
				85					90					95	
Gly	Gly	Tyr	Ser	Val	Phe	Ala	Gly	Val	Gly	Glu	Arg	Thr	Arg	Glu	Gly
			100					105					110		
Asn	Asp	Leu	Trp	Val	Glu	Met	Lys	Glu	Ser	Gly	Val	Ile	Ala	Lys	Thr
		115					120					125			
Ala	Leu	Val	Phe	Gly	Gln	Met	Asn								
	130						135								

<210> 2559

<211> 389

<212> DNA

<213> Homo sapiens

<400> 2559

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tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa tttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2560

Ser	Leu	Lys	Met	Asn	Ile	Phe	Arg	Leu	Gln	Thr	Glu	Lys	Asp	Leu	Asn
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Pro	Gln	Lys	Thr	Ala	Phe	Leu	Lys	Asp	Arg	Leu	Asn	Ala	Ile	Gln	Glu
			20					25					30		
Glu	His	Ser	Lys	Asp	Leu	Lys	Leu	Leu	His	Leu	Glu	Val	Met	Asn	Leu
		35					40					45			
Arg	Gln	Gln	Leu	Arg	Ala	Val	Lys	Glu	Glu	Glu	Asp	Lys	Ala	Gln	Asp
	50					55					60				
Glu	Val	Gln	Arg	Leu	Thr	Ala	Thr	Leu	Lys	Ile	Ala	Ser	Gln	Thr	Lys
65					70					75					80
Lys	Asn	Ala	Ala	Ile	Glu	Glu	Glu	Leu	Lys	Thr	Thr	Lys	Arg	Lys	
				85				90					95		
Met	Asn	Leu	Lys	Ile	Gln	Glu	Leu	Leu	Glu	Met	Thr	Ser	Phe	Pro	Ser
		100					105						110		
Trp	Leu	Lys	Lys	Ile	Arg	Thr	Cys	Arg	Ile	Ser	Phe	Asn	Arg	Asn	Met
		115					120					125			
Lys															

<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
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 60
 atgtggagacc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaataaat tcccttctcc atgtttggac
 180
 tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tggtttgttc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aacctaggat
 300
 ggaaaagggtg aacctgcat ttttaacct agcatcacag aagcccatga atcaggcccc
 360
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 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 2563

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 accccggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt
 120
 aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacia agaattcttt
 180
 gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggg ggacctggg
 240
 cactacacia ggcagggcct ccagcgg
 267

<210> 2564

<211> 89

<212> PRT

<213> Homo sapiens

<400> 2564

Gly	Ser	Gln	Thr	Ser	Ala	Gly	Ser	Ser	Met	Gly	Ala	Val	Gly	Ala	Thr
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Ala	Thr	Val	Ser	Thr	Pro	Val	Thr	Ile	Gln	Asn	Met	Thr	Ser	Ser	Tyr
			20					25					30		
Val	Thr	Ile	Thr	Ser	His	Val	Leu	Lys	Ala	Phe	Thr	Leu	Trp	Glu	Gln
		35					40					45			
Ala	Glu	Ala	Leu	Thr	Arg	Lys	Asn	Lys	Glu	Phe	Phe	Ala	Gln	Leu	Ser
	50					55					60				
Thr	Lys	Val	Arg	Val	Leu	Ala	Leu	Asn	Ser	Ser	Leu	Val	Asp	Leu	Val
65					70					75				80	
His	Tyr	Thr	Arg	Gln	Gly	Leu	Gln	Arg							
					85										

<210> 2565

<211> 333

<212> DNA

<213> Homo sapiens

<400> 2565

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 tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc ccccccgat
 120
 gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
 180
 gacatcgccc agttgcagca actcgggtgtc tccgatgtgg tcgatctgcg ttccacctat
 240
 gaggtggcca gcgagggccc ggggccgctg accgggcgtg gggtgaccat ccacccccat
 300
 tccttctctg ccgaccagca cgccaatgtg cac
 333

<210> 2566

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2566

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Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1           5           10           15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
          20           25           30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
          35           40           45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
          50           55           60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65           70           75           80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
          85           90           95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
          100          105          110

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<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

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120
tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcggggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat ggggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tggtgacgat gtaaactatg atgtatcact aggaacacca
360
attaagaaac cagaagggtt tgatacagat acgcgt
396

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<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

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Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1           5           10           15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
          20           25           30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
          35           40           45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
          50           55           60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

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65		70		75		80									
Gly	His	Val	Trp	Gly	Pro	Ser	Thr	Glu	Thr	Gln	Leu	Gly	Asn	Thr	Leu
				85				90						95	
Ile	Gly	Gly	Val	Gly	Val	Arg	Gly	Met	Val	Gly	Asp	Asp	Val	Asn	
		100					105					110			
Tyr	Asp	Val	Ser	Leu	Gly	Thr	Pro	Ile	Lys	Lys	Pro	Glu	Gly	Phe	Asp
	115						120					125			
Thr	Asp	Thr	Arg												
	130														

<210> 2569
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 2569
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 tacctcgctcg ccgatagagt tgcctgacc accaagcaca acgatgacga gcagtacgtg
 120
 tgggagtccc aagcgggagg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
 180
 ggcaggggca ctaagatcac actgttcctc aaggacgatc agctggagta ccttgaggag
 240
 cgctgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
 300
 tggactgaaa agacaacaga gaaggaaatt
 330

<210> 2570
 <211> 110
 <212> PRT
 <213> Homo sapiens

Leu	Ala	Ala	Gly	Ala	Asp	Val	Ser	Met	Ile	Gly	Gln	Phe	Gly	Val	Gly
1				5					10					15	
Phe	Tyr	Ser	Ala	Tyr	Leu	Val	Ala	Asp	Arg	Val	Val	Val	Thr	Thr	Lys
			20					25					30		
His	Asn	Asp	Asp	Glu	Gln	Tyr	Val	Trp	Glu	Ser	Gln	Ala	Gly	Gly	Ser
		35					40					45			
Phe	Thr	Val	Thr	Arg	Asp	Thr	Ser	Gly	Glu	Gln	Leu	Gly	Arg	Gly	Thr
	50					55					60				
Lys	Ile	Thr	Leu	Phe	Leu	Lys	Asp	Asp	Gln	Leu	Glu	Tyr	Leu	Glu	Glu
65					70				75					80	
Arg	Arg	Leu	Lys	Asp	Leu	Val	Lys	Lys	His	Ser	Glu	Phe	Ile	Ser	Tyr
			85					90					95		
Pro	Ile	Ser	Leu	Trp	Thr	Glu	Lys	Thr	Thr	Glu	Lys	Glu	Ile		
		100						105					110		

<210> 2571
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2571

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gtgtccttta aacatctcga taatgaacta tctgagctct ttactgagat cgctcgggag
120
aaatgggatg tccgttttagg gcagggaacg acagctatcg accaggtgga gaagcagcgt
180
gaagatgggt cttcctactt cgaaaccacc attacatttg aagacggcag cactgttacc
240
ggtagcgcgt tccatgttgc taccggacgt acccctaaca ccgaccgcct tggcctcgac
300
aatggttccg gtgtgaagggt tgaaagggga cgcgt
335

<210> 2572

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2572

Glu	Phe	Ala	Asn	Val	Phe	Ser	Gly	Met	Gly	Ser	Thr	Val	Thr	Leu	Ile
1				5					10					15	
Gly	Arg	Ser	Pro	Val	Leu	Leu	Lys	His	Leu	Asp	Asn	Glu	Leu	Ser	Glu
			20					25					30		
Leu	Phe	Thr	Glu	Ile	Ala	Arg	Glu	Lys	Trp	Asp	Val	Arg	Leu	Gly	Gln
		35					40					45			
Gly	Thr	Thr	Ala	Ile	Asp	Gln	Val	Glu	Lys	Gln	Arg	Glu	Asp	Gly	Ser
		50				55					60				
Ser	Tyr	Phe	Glu	Thr	Thr	Ile	Thr	Phe	Glu	Asp	Gly	Ser	Thr	Val	Thr
65					70					75				80	
Gly	Asp	Ala	Phe	Leu	Val	Ala	Thr	Gly	Arg	Thr	Pro	Asn	Thr	Asp	Arg
			85						90					95	
Leu	Gly	Leu	Asp	Asn	Gly	Ser	Gly	Val	Lys	Val	Glu	Arg	Gly	Arg	
			100					105						110	

<210> 2573

<211> 460

<212> DNA

<213> Homo sapiens

<400> 2573

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gccggatcca taccggaccg ttctgtcagg gtggtcggac atcgacgaca ccgcagatgc
120
cgagacgacg ttgatacgtc caccggcgcg gtccgtgatc caccgcgtcg tcgccgttgc
180
cgccactggc acgatgaggg ccatcaccga gaagagaacg gccaccactc gcagaccacc
240
tcgtcccaga agagcgagga cgaaggcgat gacggcgatg accagagccg gtacagccaa
300
cgatcccacc agaacggagg agatgaagggt gagggcattg tgtgagggga ggatcgcggc
360

cactgaccac gccagtaccg gcaggggtcag gatcagcccg acgagaccgg aagtgatgcg
 420
 tagccaggaa tgacgggagg ttttcgtgtc agccacgcgt
 460

<210> 2574
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2574
 Met Gly Thr Val Asp Leu Gly Arg Leu Val Arg Ala Gly Ser Ile Pro
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 Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg
 20 25 30
 Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg
 35 40 45
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn
 50 55 60
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly
 65 70 75 80
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn
 85 90 95
 Gly Gly Asp Glu Gly Glu Gly Ile Val
 100 105

<210> 2575
 <211> 3954
 <212> DNA
 <213> Homo sapiens

<400> 2575
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 ccactctcgc gcctccgaac agccacaggg gcaaagccct gtcacccccca ggatccggtc
 120
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 180
 caggaggcaa cttctgagac gcagctcctg agaggggcag ggaccaggcg cgggaggcca
 240
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 300
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 420
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 480
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 660

ccccggccag ccagccgcca caggaactgg tgtgcctacg tggtgacccg gacagtgagc
720
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780
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2280

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<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

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Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
		35					40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85					90					95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
			100					105					110		
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
		115					120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
	130					135					140				
Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155					160
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165					170					175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
		180						185					190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
	195					200						205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
	210					215					220				
Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235					240
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
				245					250					255	
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
		260					265						270		
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
		275					280					285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
	290					295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
305					310					315					320
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
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Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
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Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

1836

785					790					795				800
Glu	Asp	Arg	Leu	His	Gln	Leu	Ser	Leu	Lys	Asp	Leu	Thr	Gly	Pro
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Gly	Glu	Ala	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Leu	Gln	Gly	Pro	Pro
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Pro	Ala	Gly	Pro	Pro	Gly	Ser	Pro	Gly	Lys	Asp	Gly	Gln	Glu	Gly
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Ile	Gly	Pro	Pro	Gly	Pro	Gln	Gly	Glu	Gln	Gly	Val	Glu	Gly	Ala
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Ala	Ala	Pro	Val	Pro	Gln	Val	Ala	Phe	Ser	Ala	Ala	Leu	Ser	Leu
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Arg	Ser	Glu	Pro	Gly	Thr	Val	Pro	Phe	Asp	Arg	Val	Leu	Leu	Asn
			885					890						895
Gly	Gly	Tyr	Tyr	Asp	Pro	Glu	Thr	Gly	Val	Phe	Thr	Ala	Pro	Leu
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Ala	His	Ser	Glu	Glu	Pro	Leu	Thr	Ile	Phe	Ser	Gly	Ala	Leu	Leu
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<211> 343

<212> DNA

<213> Homo sapiens

<400> 2577

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180

agtgttcctt cggctaccgt gcactcagcc ccacagtgc ccctgagtgg ataccggccc

240

tgccctgcct gggctctcaa tgggggctcg gggcctcaca gggccagcac gagccacttg

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343

<210> 2578

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2578

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      20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
      35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
      50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
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Ser Asn Arg Pro
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<210> 2579

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2579

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240
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<212> PRT

<213> Homo sapiens

<400> 2580

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      20           25           30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
      35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
      50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
65           70           75           80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

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Ile	His	Arg	Phe	Trp	Tyr	Asn	Tyr	Arg	Gln	Arg	Lys	Ser	Met	Asp	Ser				
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<210> 2581

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2581

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459

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<212> PRT

<213> Homo sapiens

<400> 2582

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			20					25					30						
Gln	Thr	Thr	Val	Pro	Asp	Thr	Gln	Gln	Phe	Val	Tyr	Gln	Ala	His	Ser				
		35					40					45							
Leu	Asp	Lys	Ile	Glu	Ile	Ile	Gly	Arg	Ile	Leu	Gln	Ala	Asn	Asp	Val				
	50					55					60								
Glu	Lys	Val	Ile	Ile	Phe	Cys	Arg	Thr	Lys	Arg	Ala	Cys	Gln	Arg	Leu				
65					70				75					80					
Ser	Asp	Asp	Leu	Asp	Asp	Arg	Gly	Phe	Lys	Thr	Arg	Ala	Ile	His	Gly				
				85				90					95						
Asp	Leu	Thr	Gln	Val	Ala	Arg	Glu	Lys	Ala	Leu	Lys	Lys	Phe	Arg	His				
			100					105					110						
Gly	Glu	Ala	Thr	Ile	Leu	Val	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Ile				
		115				120						125							
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<210> 2583

<211> 7098

<212> DNA

<213> Homo sapiens

<400> 2583

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<211> 1186

<212> PRT

<213> Homo sapiens

<400> 2584

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Leu Ala Arg Lys Leu Ser Glu Thr Asn Pro Gln Glu Arg Asn Pro Gln		
340	345	350
Gln Asn Met Asn Ile Arg Gln His Val Arg Pro Glu Glu Asp Phe Pro		
355	360	365
Gly Arg Thr Pro Asp Arg Asn Tyr Ser Asp Met Leu Asn Leu Met Arg		
370	375	380
Leu Glu Glu Gln Leu Ser Pro Arg Ser Arg Val Phe Ala Ser Cys Ala		
385	390	395
Lys Glu Asp Gly Cys His Glu Arg Asp Asp Asp Thr Thr Ser Val Asn		
405	410	415
Ser Asp Arg Ser Glu Glu Val Phe Asp Met Thr Lys Gly Asn Leu Thr		
420	425	430
Leu Leu Glu Lys Ala Ile Ala Leu Glu Thr Glu Arg Ala Lys Ala Met		
435	440	445
Arg Glu Lys Met Ala Met Glu Ala Gly Arg Arg Asp Asn Met Arg Ser		
450	455	460
Tyr Glu Asp Gln Ser Pro Arg Gln Leu Pro Gly Glu Asp Arg Lys Pro		
465	470	475
Lys Ser Ser Asp Ser His Val Lys Lys Pro Tyr Tyr Gly Lys Asp Pro		
485	490	495
Ser Arg Thr Glu Lys Lys Glu Ser Lys Cys Pro Thr Pro Gly Cys Asp		
500	505	510
Gly Thr Gly His Val Thr Gly Leu Tyr Pro His His Arg Ser Leu Ser		
515	520	525
Gly Cys Pro His Lys Asp Arg Val Pro Pro Glu Ile Leu Ala Met His		
530	535	540
Glu Ser Val Leu Lys Cys Pro Thr Pro Gly Cys Thr Gly Arg Gly His		

545					550					555				560
Val	Asn	Ser	Asn	Arg	Asn	Ser	His	Arg	Ser	Leu	Ser	Gly	Cys	Pro Ile
				565					570					575
Ala	Ala	Ala	Glu	Lys	Leu	Ala	Lys	Ala	Gln	Glu	Lys	His	Gln	Ser Cys
			580					585					590	
Asp	Val	Ser	Lys	Ser	Ser	Gln	Ala	Ser	Asp	Arg	Val	Leu	Arg	Pro Met
		595					600					605		
Cys	Phe	Val	Lys	Gln	Leu	Glu	Ile	Pro	Gln	Tyr	Gly	Tyr	Arg	Asn Asn
	610					615					620			
Val	Pro	Thr	Thr	Thr	Pro	Arg	Ser	Asn	Leu	Ala	Lys	Glu	Leu	Glu Lys
625					630					635				640
Tyr	Ser	Lys	Thr	Ser	Phe	Glu	Tyr	Asn	Ser	Tyr	Asp	Asn	His	Thr Tyr
				645				650						655
Gly	Lys	Arg	Ala	Ile	Ala	Pro	Lys	Val	Gln	Thr	Arg	Asp	Ile	Ser Pro
			660					665					670	
Lys	Gly	Tyr	Asp	Asp	Ala	Lys	Arg	Tyr	Cys	Lys	Asp	Pro	Ser	Pro Ser
		675					680				685			
Ser	Ser	Ser	Thr	Ser	Ser	Tyr	Ala	Pro	Ser	Ser	Ser	Ser	Asn	Leu Ser
	690					695					700			
Cys	Gly	Gly	Gly	Ser	Ser	Ala	Ser	Ser	Thr	Cys	Ser	Lys	Ser	Ser Phe
705					710					715				720
Asp	Tyr	Thr	His	Asp	Met	Glu	Ala	Ala	His	Met	Ala	Ala	Thr	Ala Ile
				725					730					735
Leu	Asn	Leu	Ser	Thr	Arg	Cys	Arg	Glu	Met	Pro	Gln	Asn	Leu	Ser Thr
			740					745					750	
Lys	Pro	Gln	Asp	Leu	Cys	Ala	Thr	Arg	Asn	Pro	Asp	Met	Glu	Val Asp
		755				760					765			
Glu	Asn	Gly	Thr	Leu	Asp	Leu	Ser	Met	Asn	Lys	Gln	Arg	Pro	Arg Asp
	770				775						780			
Ser	Cys	Cys	Pro	Ile	Leu	Thr	Pro	Leu	Glu	Pro	Met	Ser	Pro	Gln Gln
785					790					795				800
Gln	Ala	Val	Met	Asn	Asn	Arg	Cys	Phe	Gln	Leu	Gly	Glu	Gly	Asp Cys
				805				810						815
Trp	Asp	Leu	Pro	Val	Asp	Tyr	Thr	Lys	Met	Lys	Pro	Arg	Arg	Ile Asp
		820						825					830	
Glu	Asp	Glu	Ser	Lys	Asp	Ile	Thr	Pro	Glu	Asp	Leu	Asp	Pro	Phe Gln
	835					840						845		
Glu	Ala	Leu	Glu	Glu	Arg	Arg	Tyr	Pro	Gly	Glu	Val	Thr	Ile	Pro Ser
	850				855					860				
Pro	Lys	Pro	Lys	Tyr	Pro	Gln	Cys	Lys	Glu	Ser	Lys	Lys	Asp	Leu Ile
865					870					875				880
Thr	Leu	Ser	Gly	Cys	Pro	Leu	Ala	Asp	Lys	Ser	Ile	Arg	Ser	Met Leu
				885				890						895
Ala	Thr	Ser	Ser	Gln	Glu	Leu	Lys	Cys	Pro	Thr	Pro	Gly	Cys	Asp Gly
		900						905					910	
Ser	Gly	His	Ile	Thr	Gly	Asn	Tyr	Ala	Ser	His	Arg	Ser	Leu	Ser Gly
	915					920						925		
Cys	Pro	Arg	Ala	Lys	Lys	Ser	Gly	Ile	Arg	Ile	Ala	Gln	Ser	Lys Glu
	930					935					940			
Asp	Lys	Glu	Asp	Gln	Glu	Pro	Ile	Arg	Cys	Pro	Val	Pro	Gly	Cys Asp
945					950					955				960
Gly	Gln	Gly	His	Ile	Thr	Gly	Lys	Tyr	Ala	Ser	His	Arg	Ser	Ala Ser
				965				970						975
Gly	Cys	Pro	Leu	Ala	Ala	Lys	Arg	Gln	Lys	Asp	Gly	Tyr	Leu	Asn Gly

980 985 990
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro
 995 1000 1005
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr
 1010 1015 1020
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys
 1025 1030 1035 1040
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser
 1045 1050 1055
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile
 1060 1065 1070
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys
 1075 1080 1085
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu
 1090 1095 1100
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu
 1105 1110 1115 1120
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln
 1125 1130 1135
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val
 1140 1145 1150
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro
 1155 1160 1165
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile
 1170 1175 1180
 Gln Val
 1185

<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

cactcactcc tccacagaat ttggcctcag ccagcccccac gctcagcatg cccagccctg
 60
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccccgtc
 120
 ctctaggtac ctgtgcccc agtctcaagc atcactcgt gtctccctca catgccttct
 180
 gggcctctag cctcaaaga gctaaagtat gtgagcactt tctcagcct ttaaaccgat
 240
 taagtcatgt catctcaca aggctgctgt gttttattac ctctgtttca ggtgcaagtc
 300
 atccccggga ggagtgggtg ggatgccgcc tgaccctggg ccacctggct gcagcatctg
 360
 tgttgatgac caccctcctg cctcaggctt tgctcctgaa tggtcttgct ctctaggtct
 420
 gtccgctcct ggccctgctc ttcttaactc cgttcaagcc ccctgggtca cacgtccatg
 480
 ctcatcactt caatgacgcg gatgctggcg atccccaaat ctctaatacc aagtgcagat
 540
 ct
 542

<210> 2586
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2586
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro
 1 5 10 15
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser
 20 25 30
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser
 35 40 45
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly
 50 55 60
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val
 65 70 75 80
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr
 85 90 95
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro
 100 105 110
 Gln Ala Leu Leu Asn Val Leu Ala Leu
 115 120

<210> 2587
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2587
 ncgaatatcc atgcagcgat cccgggcgga atgctctcca acatggagtc ccagcttgag
 60
 gcccagggcg ctggagaccg catggatgag gtcattgaagg aggtgccgcg cgttcgtaag
 120
 gatgccggct acccgccgct ggtaaccccg tcgtcccaga tcgtgggaac ccaggcggtg
 180
 ttcaacgtct tgatgggcaa tggttcgtac aagaatctca ctgccgagtt tgccgacctc
 240
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc
 300
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag
 360
 tgggatcagt tggtcgagca ggccaagagt cttgagggct tcgacggctc cgacgaggac
 420
 gttcttacca acgcg
 435

<210> 2588
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2588
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu


```

      1             5             10             15
Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met
      20             25             30
Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val
      35             40             45
Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu
      50             55             60
Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
      65             70             75             80
Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile
      85             90             95
Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg
      100            105            110
Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala
      115            120            125
Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn
      130            135            140
Ala
145

```

<210> 2589

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2589

```

ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc
60
ggcgatccgg ttgagcagat cagagcgctg accagggggc gcggcgtcga tttcgcgatac
120
gaggtcgteg gcatcgtcga ggtcatggag caggcctact gggcggcgcg acgcggcggc
180
acgatcgtct acgtcggggc gctgggcata gacgccaaagc tggtcctgcc ggccaacgac
240
ctgcacggcg gcgccaagac gatcatcggc tgcgccaaagc gattgggcgc agtgcgcaacc
300
gactatgcca agatgatctc gctggtcgag accggacggc tggacctggg cgggatgatac
360
acgcgt
366

```

<210> 2590

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2590

```

Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val
      1             5             10             15
Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg
      20             25             30
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
      35             40             45
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100             105             110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115             120

```

<210> 2591
 <211> 341
 <212> DNA
 <213> Homo sapiens

```

<400> 2591
acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtggttat tctggggctg
60
agcagcccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tcctgctcca gggcaggccc tgggcagggc aatgctgggg acacggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
gggggtgacc tgcactcgag gtcctggga agacggggag gggtgaggtt acatgagggg
300
gaggggtcag ttggtgcatt cacagaacag caggggtggcc a
341

```

<210> 2592
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 2592
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1      5      10      15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
20     25     30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
35     40     45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
50     55     60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65     70     75     80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
85     90     95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
100    105

```

<210> 2593
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg
 60
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat tatcgggtacc
 120
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
 240
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggattttat
 420
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
 480
 gctgagatgt ctcttaagct t
 501

<210> 2594

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1				5					10					15	
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35				40					45				
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50					55					60				
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65					70				75					80	
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
				85					90					95	
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
			100						105				110		
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
	115						120					125			
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
	130					135					140				
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145					150					155				160	
Ala	Glu	Met	Ser	Leu	Lys	Leu									
				165											

<210> 2595

<211> 928

<212> DNA

<213> Homo sapiens

<400> 2595

agatcttcca gatgcaacaa tgatcaatta agacacgcgg cgacatgggtg gcccctgcct
 60
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg
 120
 gtcacaatttt ctgggggtca ctcatataac accaacaaat gggatatttg tgaagaactt
 180
 cgcttgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
 240
 tgggtggtcgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg
 300
 aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
 360
 tcggatccac tgaaacagaa acagagtttg ccacttcaga aggaggcatt agaagctaata
 420
 gttacccagg atctgaagct tcctggcttc gtagaagaat cctgtgaaca tacagaccaa
 480
 tttcaattga gttcacaaat gcatgagtct atcagagagt atttggtaaa aagacaattt
 540
 tctacaaaagg aggacacaaa taataaggaa caagggtgtgg ttattgattc tctaaaatta
 600
 agtgaggaga tgaagcccaa tctagatggg gttgatttat tcaacaatgg tggttctgga
 660
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
 720
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag
 780
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct
 840
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
 900
 gacattcttc ttggtcaaca taatgatg
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596

Arg	Ser	Ser	Arg	Cys	Asn	Asn	Asp	Gln	Leu	Arg	His	Ala	Ala	Thr	Trp
1				5				10						15	
Trp	Pro	Leu	Pro	His	Pro	Pro	Gly	Ile	Pro	Val	Ile	Pro	Ala	Ser	His
			20					25					30		
Phe	Met	Gly	Tyr	Asn	Leu	Met	Leu	Val	Thr	Ile	Ser	Gly	Ala	His	Ser
		35					40					45			
Tyr	Asn	Thr	Asn	Lys	Trp	Asp	Ile	Cys	Glu	Glu	Leu	Arg	Leu	Arg	Glu
	50					55					60				
Leu	Glu	Glu	Val	Lys	Ala	Arg	Ala	Ala	Gln	Met	Glu	Lys	Thr	Met	Arg
65				70					75					80	
Trp	Trp	Ser	Asp	Cys	Thr	Ala	Asn	Trp	Arg	Glu	Lys	Trp	Ser	Lys	Val
				85				90						95	
Arg	Ala	Glu	Arg	Asn	Ser	Ala	Gly	Lys	Glu	Gly	Arg	Gln	Leu	Arg	Ile

```
<400> 2597
ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
60
ggctgcacct gcagctgagg gtttagcagga attaggagat aacagtagaa tagggctaga
120
ctgaaaaggc ctttgatgcc aggttaggaa atttacat ttatccacaaa atccaaatcc
180
tcctttaata atgagatgtc tttaacaagt tttgggcaag agtgggtatgg ctgacctggg
240
gtcctgggaa ggaactgtgt ggggatgggtg tgcaggactt acctaggggtg ggaaaggcac
300
aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
360
caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaa
420
gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
480
ggtgagacgt ccagtcgaca gtactacca ctggccagtg agaaatgtgg gaccaggggt
540
caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccaggggtgga agcgggtggg
600
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tcactccacg agtgctattt cacttacgcg t
631

<210> 2598
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2598
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
1 5 10 15
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
20 25 30
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
35 40 45
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
50 55 60
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
65 70 75 80
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
85 90 95
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
100 105

<210> 2599
<211> 356
<212> DNA
<213> Homo sapiens

<400> 2599
nagatcttat acagggacgt gatgttggag aactactgga accttgtttc tctgggactg
60
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
120
aagagctgtg tgaaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
180
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagacttt
300
tccttcaagg aaccccagaa aaatgtgcat gatttttgagt gtcaatggag agatgn
356

<210> 2600
<211> 118
<212> PRT
<213> Homo sapiens

<400> 2600
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
1 5 10 15
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
20 25 30
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

          35          40          45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
          50          55          60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
65          70          75          80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
          85          90          95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
          100          105          110
Glu Cys Gln Trp Arg Asp
          115

```

<210> 2601

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2601

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gcgcgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgccc
60
tacttgtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cggtggtggg
120
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
180
ttgatgcct tgcccgaaga cctcggtatc cgccgcaccg acgccaccg cgaactgttg
240
gccgccaaga gcgtggccga cctggtggag tggtcgggtg gcttggtgcaa cccgcccggc
300
aagttcagga gctggtaa at gcgcgcct
329

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<210> 2602

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2602

```

Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
1          5          10          15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
          20          25          30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
          35          40          45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
          50          55          60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
65          70          75          80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
          85          90          95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
          100          105

```

<210> 2603

<211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

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tcatgatcca ttgctctacc ctttacgggt gtgcacctac gcccaggtcg gtggtcagga
60
gcatcgggttc ggtggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca
120
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180
agctctgggtt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
240
tctcggagat gatcgcgtaa ctttcattgt cgtagaggat cttgcacgca tcgatgatgc
300
gcttgatctc cttggcagtg aagatgattt ccatcggggg gttggccgac agatactgac
360
cggagctggg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgccg
420
cgg
423

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<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

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Met Glu Ile Ile Phe Thr Ala Lys Glu Ile Lys Arg Ile Ile Asp Ala
1      5      10      15
Cys Lys Ile Leu Tyr Asp Asn Glu Gly Tyr Ala Ile Ile Ser Glu Ile
20     25     30
Gly Leu Val Ser Gly Val Asp Arg Val Val Ser Ala Thr Ala Gln Gly
35     40     45
Asn Gln Ser Phe Asp Phe Thr Glu Val Ile Ser Ala Gln Ile Val Ala
50     55     60
His Leu Thr Thr Tyr His Asn Leu Pro Ser Ala Asn Asn Gly Val Lys
65     70     75     80
Glu Val Leu Asp Leu Gly Thr Thr Glu Pro Met Leu Leu Thr Thr Asp
85     90     95
Leu Gly Val Gly Ala Gln Pro
100

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<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

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ngggaggggag ggcattgtcaa aagcgactgt atccagaggg ttgatttaa acatttttca
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aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccacttcttc
120
tttgcattgct gggacctgtt ccactttcaa aatgtgtcat ttggaagga aaggaggaa
180

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caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aagggtgccc
 240
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat
 300
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gage
 354

<210> 2606
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2606
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln
 1 5 10 15
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe
 20 25 30
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys
 35 40 45
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val
 50 55 60
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro
 65 70 75 80
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met
 85 90 95
 Gly His Pro Gly Leu
 100

<210> 2607
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 2607
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 60
 tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccag gccggaatgg
 120
 atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaaccxaa attcccacca
 180
 cacggggggcc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa
 240
 actttttttt ttttaaan nn anacccccaa aaaaaccaa aaaaaaatt taaaaaa
 297

<210> 2608
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2608
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu
 1 5 10 15
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

		20					25				30				
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly
		35					40					45			
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile
	50					55					60				
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe
65					70					75					80
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys	
				85					90					95	

<210> 2609
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 2609
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 ttgacacgtc cctgacgata cctatccgct catctggaga cccatgcgtt ccttggaccc
 120
 caattgcta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctgcacatcg
 180
 tgaaagttct acctcggggg cgtcacatcg gctgtcatcg tcggcaaata actcagctgg
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 ccgtaccctt cgtcacgccc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
 300
 ccacc
 305

<210> 2610
 <211> 98
 <212> PRT
 <213> Homo sapiens

Met	Met	Ser	Gly	Lys	Asp	Asp	Pro	Gly	Met	Ala	Lys	Val	Tyr	Gly	Phe
1				5				10					15		
Val	Asp	Thr	Ser	Leu	Thr	Ile	Pro	Ile	Arg	Ser	Ser	Gly	Asp	Pro	Cys
			20					25				30			
Val	Pro	Trp	Thr	Pro	Ile	Ala	Tyr	Glu	Lys	Ile	Phe	Phe	Phe	Pro	Pro
		35					40				45				
Lys	Lys	His	Pro	Pro	Leu	Ala	Ser	Val	Lys	Val	Leu	Pro	Arg	Gly	Arg
	50					55					60				
His	Leu	Gly	Cys	His	Arg	Arg	Gln	Ile	Thr	Gln	Leu	Ala	Val	Pro	Phe
65					70					75					80
Val	Ile	Ala	Arg	Ala	Thr	Asp	Leu	Asp	Gly	Xaa	Ala	Cys	Thr	Ala	Thr
				85					90					95	

Thr Thr

<210> 2611
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 2611

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 gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcaccctg
 120
 acgcccagcg ccaccgctgt cggagctcag gtgcgccgcy tcgaggtggc aacagccaac
 180
 ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccttac
 240
 ggcgagacct catgggtccg gttcaccgcy accggcaccg acgacggctc ccccggcgtg
 300
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg
 342

<210> 2612

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2612

Ala	Ala	Ala	Ile	Asp	Gly	Asp	Ser	Ser	Thr	Ser	Trp	Val	Ser	Ser	Ser
1				5					10					15	
Leu	Gln	Thr	Ala	Val	Gly	Gln	Trp	Leu	Gln	Val	Asp	Phe	Asp	His	Pro
			20					25					30		
Val	Thr	Asn	Ala	Thr	Ile	Thr	Leu	Thr	Pro	Ser	Ala	Thr	Ala	Val	Gly
		35					40					45			
Ala	Gln	Val	Arg	Arg	Val	Glu	Val	Ala	Thr	Ala	Asn	Gly	Thr	Ser	Thr
		50				55					60				
Ile	Arg	Phe	Asp	Gln	Pro	Gly	Lys	Pro	Leu	Thr	Ala	Ala	Leu	Pro	Tyr
65				70					75					80	
Gly	Glu	Thr	Ser	Trp	Val	Arg	Phe	Thr	Ala	Thr	Gly	Thr	Asp	Asp	Gly
			85					90					95		
Ser	Pro	Gly	Val	Gln	Phe	Gly	Ile	Thr	Asp	Phe	Ser	Val	Thr	Gln	Tyr
		100						105					110		

Asp Ala

<210> 2613

<211> 414

<212> DNA

<213> Homo sapiens

<400> 2613

acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggccctgggcc ctgggcatca
 60
 ttctcctcct ccaaaagggtg aggggtctgac ctaatggtag tttgtctgat gttttccaga
 120
 tatgccccta ctgggaaggg ccaagtgggc aggcagagtc tgggggtggag cgaggtgggg
 180
 ctgggaagca ctccctgcttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc
 240
 ctccctcctgg gaggaggaaa ggagggtctg cctccaggtc tcaggctgag ggagtgggct
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact
 360
 ctggggcccc tcccaggctc tcctcgtggc aggcagggac ttggggccagc atgg
 414

<210> 2614
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 2614
 Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly
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 Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser
 20 25 30
 Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu
 35 40 45
 Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg
 50 55 60
 Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala
 65 70 75 80
 Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser
 85 90 95
 Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp
 100 105

<210> 2615
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 2615
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 60
 gacgtcgacg ccatgctgaa ggaaacgctg gccagttcg gccacatcga tatcctcgtc
 120
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgcacg tgtgcgaaga cgatttcgac
 180
 cgggtcatgc gcattaacct gaaatcgatg ttctgtgctg gccaggccgc ggcgcgcgag
 240
 atgggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc
 300
 attccgaacc aggtgccgta cgtgggtgctg aaaggcgcca tcaaccagct gaccaaggtc
 360
 atggccttga acctggcgcc gcacgggtgcg cgct
 394

<210> 2616
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 2616
 Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Arg Xaa Asp Val

```

      1             5             10             15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20             25             30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35             40             45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50             55             60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
      65             70             75             80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85             90             95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100            105            110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115            120            125
Gly Ala Arg
      130

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<210> 2617
 <211> 513
 <212> DNA
 <213> Homo sapiens

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<400> 2617
naccggttgg catcatgctc acagcactgg gggttccctt cttctcttttc ctcttcagaa
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agacattgtg agatgggaaa tatcatggaa acacctatac ttccgggtc ccacttgaac
120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttgccc caacggttct gggaagacca ccttggtacg cacgttatgc
240
ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tccgcacct gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctaccg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccg atcgacgct caccactctc tca
513

```

<210> 2618
 <211> 171
 <212> PRT
 <213> Homo sapiens

```

<400> 2618
Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
1             5             10             15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
20            25            30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

35					40					45					
Leu	Asn	Asp	Val	Ser	Val	Ser	Phe	Gln	Ala	Gly	Val	Met	His	Ala	Ile
50					55					60					
Leu	Gly	Pro	Asn	Gly	Ser	Gly	Lys	Thr	Thr	Leu	Val	Arg	Thr	Leu	Cys
65	70					75					80				
Gly	Ala	Leu	Ser	Pro	Glu	Ser	Gly	Ser	Val	Lys	Phe	Asp	Gly	Thr	Asp
85					90					95					
Leu	Ser	Thr	Met	Ser	Ala	Ser	Cys	Ile	Ala	Arg	Arg	Ile	Ala	Ile	Val
100					105					110					
Trp	Gln	Ser	Ala	Thr	Ala	Pro	Ser	Asp	Leu	Thr	Val	Arg	His	Leu	Val
115					120					125					
Gly	Tyr	Gly	Arg	Tyr	Ala	His	Thr	Pro	Trp	Trp	Gln	Ile	Arg	Asp	Thr
130					135					140					
Ser	Ala	Asp	Ser	His	Val	Glu	Gln	Ala	Met	Glu	Leu	Ala	Asp	Val	Thr
145	150					155					160				
Cys	Phe	Ala	Asp	Arg	Arg	Val	Thr	Thr	Leu	Ser					
165					170										

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<210> 2619
<211> 348
<212> DNA
<213> Homo sapiens
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<400> 2619
nnaaatttcg acgaccttga ggttttcctc aagctgttgc cgcgttcggc anccggggaa
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cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggt ttacgagcgg
240
gcgggcggtc acccttacgg ctcggtgtac cccgggccga ttggtgcggt gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtgggtctgc catacgcg
348

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<210> 2620
<211> 116
<212> PRT
<213> Homo sapiens
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<400> 2620															
Xaa	Asn	Phe	Asp	Asp	Leu	Glu	Val	Phe	Leu	Lys	Leu	Leu	Pro	Arg	Ser
1				5					10					15	
Ala	Xaa	Gly	Glu	Arg	Met	Asn	Pro	Tyr	Asn	Ser	Val	Trp	Ser	Gly	Val
			20					25					30		
Thr	Asp	Gly	Asp	Gly	Pro	Gln	Glu	Gln	His	Val	Ile	Phe	Leu	Asp	Asn
		35				40						45			
Gly	Arg	Thr	Asp	Val	Leu	Ala	Asp	Thr	Leu	Gly	Arg	Glu	Val	Leu	Arg
	50					55				60					
Cys	Ile	Arg	Cys	Ala	Ser	Cys	Ile	Asn	Ile	Cys	Pro	Val	Tyr	Glu	Arg
65					70					75				80	
Ala	Gly	Gly	His	Pro	Tyr	Gly	Ser	Val	Tyr	Pro	Gly	Pro	Ile	Gly	Ala

	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
		100						105					110		
Leu	Pro	Tyr	Ala												
		115													

<210> 2621

<211> 1485

<212> DNA

<213> Homo sapiens

<400> 2621

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acgcgtgcag gtaaaccaga ggccgtgtga ccagctcagt gctggtttac ggaacaactc
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ttacttttaa aaattacttg ttcccccaaa ttgttgagtg ccgccgtttg gtttcctatg
120
ttttctttcc ctgttttgat tttgctgaag ggagaggtgg tggtaggttag gatcagagct
180
ctcctggcat ccgtggggag gatttgettg tggtaggttc gggtcatgc ccagacacac
240
tcaactgccc gtctgtccaa ggctccctt tcccctttgc tggtagggagg agctcgtgtg
300
ctccttgccc gcttactgga agggcgtttt tcagagctgc agggacaggg tgagcagctg
360
aagggctagg agggaagccg gccccgctc tgcagaagct gcatttcagc tgaatctgtg
420
tttcagcctc agttgggtgc accgtagacc cctctcctcc cggatgggtca tgtttttgtc
480
acattagaga ataaacagcc acacacacat ttttttttcc tttaaaacag taacttggaa
540
atatgaaaag gccagaagga ggagcaaggg ctgttttctg gagtgggtga ggtgttgtcc
600
tgcagttgtc attgtcttct ccaccgggct gttcccattt atttcctgtg gaactgaatc
660
cctcctccct ccaactcctg ggagcccagg tggctccttg ccaccattca ggctttccaa
720
gaagccaacc accttgagga ttttttttct tgaatttcgc tgttttcttc tgcttccttt
780
agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaatc
840
catctgagtg attgtcagt taaggccttt taaaacaaaa gcaagttctt tgtaggaat
900
tggtaaaaat tcattctctt cttaagccc atcaactccc aggacgggtt gagttactca
960
gttacctaag cttgctattc atccaaatca ttttctagag tcaactgtata aggttctatg
1020
agtagctgtg tatgaataaa tattacctgt ctacctcaa atacacatac tgctgaagca
1080
ttctgtacaa ccgtgtgtta tcacagtgc gttttaagt taacngttga acttaggcac
1140
tttctgtgtt ggcggaataa gaaaggatnt aacagttaca agcctccaaa ttcagataaa
1200
attaaatcac agttcagatg aaactgaata tcattgtaat aatctcataa tatatatttg
1260

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taacttgnta gctatctttg aaatcactgn acttttgcaat ggtgctaagc tgatagattt
 1320
 aaatacacag acgggcgagt ggcgcccgtg tcgatgtctt cagccagtgg tgaccctgct
 1380
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 1440
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 1485

<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
1				5				10					15		
Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20					25					30		
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
		35					40					45			
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50					55					60				
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65					70					75					80
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

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 120
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcggc
 180
 ggtggtagtg gcggcggcgg cggcggcggc agcagcggca ggagggcaga gatggaaccc
 240
 acctttcccc agggatatgt tatgttcaac caccgtcttc ccccggtcac cagcttcacc
 300
 cggccggcgg ggtcggccgc ccctcccccg caatgcgtgt tatectctc tacctccgca
 360
 gccccggccg ctgagcccc ccctccgcca gccccggaca tgactttcaa gaaggagccg
 420
 gcggcgtcag ccgcggcctt cccctcgcag aggacctcct gggggttctt gcagtctttg
 480
 gttagcatca aacaggagaa acccgcggat cctgaggagc agcagtccca ccaccaccat
 540
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga
 600

ggcgggtgaag gggggagtc cggcgctcatc caggacctca gtattctcca ccagcatgtc
660
cagcagcaac cagcccagca ccaccgtgac gtattactca gcagcagtag caggactgat
720
gaccaccatg gcactgagga gccaaagcag gacactaatg tcaaaaaggc aaaaaggcca
780
aagccagaat ctcagggaat caaagccaag aggaagccaa gtgcatcttc caaaccttct
840
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900
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960
ggagaaagac ctttccagtgc cagccagtgt agtatgggtt tcattcagaa atacctacta
1020
cagagacatg agaaaattca tagtagagag aagccatttg gatgtgatca gtgcagcatg
1080
aagtttattc agaagtacca tatggagaga cacaagagga cacatagtgg agaaaagcca
1140
tataagtgtg acacttgcca acagtatttt tcaaggactg atagattgtt gaagcacagg
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1260
cataccaata tgggtaatct ggctgtgttg tctcagggaa atacaagttc ttcaaggaga
1320
aaaacaaagt caaaaagcat agctattgaa aataaggaac agaagaccgg taaaacaaat
1380
gaatcgcaaa tttcaaataa tataaacatg cagagttact cagtagaaat gcctaccgtg
1440
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1500
ttgatcttta agaaaggaag cagaaagaat acagataaaa actaccttaa ctttgtgtca
1560
ccattaccag acatagtagg acagaaatcc ttgtctggaa aaccaagtgg ctcaactggc
1620
atagtatcaa ataatagtgt ggagaccatt ggtcttctcc aaagtacaag tggcaaacaa
1680
ggtcagataa gtagtaatta tgatgatgcc atgcagtttt caaagaaaag aagatattta
1740
ccaactgcca gcagcaacag tgccctttct ataaacgtag gacacatggc ctcccaacag
1800
tctgtcatcc agtctgcagg tgtcagtgtt ttggacaatg aggaccatt gtcacttatt
1860
gactcctcag ctctaaatgc tgaaattaaa tcttgtcatg acaagtctgg aattcctgat
1920
gaggttttac aaagtatttt ggatcaatac tccaacaaat cagaaagcca gaaagaggat
1980
cctttcaata ttgcagaacc acgagtggat ttacacacct caggagaaca ctcagaattg
2040
gttcaagaag aaaatttgag ccagggcacc caaacacctt caaatgataa agcaagtatg
2100
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2160
actcttgac acggtttcca atttgtcagt ttgtcttcac ctctccacaa ccacactttg
2220

tttccagaaa aacaaatata cactacgtct cctttggagt gtggtttcgg ccaatctgtt
 2280
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<211> 895

<212> PRT

<213> Homo sapiens

<400> 2624

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Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met				
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Val Ser Gln Gln Ser Val Ile Gln Ser Ala Gly Val Ser Val Leu Asp				
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His Ser Glu Leu Val Gln Glu Glu Asn Leu Ser Pro Gly Thr Gln Thr				
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Pro Ser Asn Asp Lys Ala Ser Met Leu Gln Glu Tyr Ser Lys Tyr Leu				
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Gln Gln Ala Phe Glu Lys Ser Thr Asn Ala Ser Phe Thr Leu Gly His				
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Gly Phe Gln Phe Val Ser Leu Ser Ser Pro Leu His Asn His Thr Leu				
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Phe Pro Glu Lys Gln Ile Tyr Thr Thr Ser Pro Leu Glu Cys Gly Phe				
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Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro				
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Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu				
	740		745	750
Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu				
	755		760	765
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser				
	770		775	780
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser				
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Thr Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro				
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Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala				
	820		825	830
Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr				
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Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser				
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Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys
50 55 60
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65 70 75 80
Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe
85 90 95
Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
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Ala	Pro	Phe	Ser	Ser	Thr	Ser	Phe	Ser	Val	Pro	Lys	Lys	Ala	Arg
		35					40					45		
Asp	Cys	Thr	Cys	Ile	Ser	Thr	Ala	Glu	Leu	Phe	Ile	Cys	Asp	Ser
	50					55					60			
Phe	Phe	Arg	Ser	Ser	Gly	Ser	Arg	Glu	Arg	His	Ser	Phe	Lys	Val
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<213> Homo sapiens

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			20					25					30		
Lys	Cys	Ala	Asn	Asp	Val	Phe	Gln	Val	Gly	Ala	Arg	Asp	Gly	Gln	Gly
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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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Ile	Leu	Lys	Phe	Asn	Ser	Lys	Phe	Glu	Ser	Gly	Asn	Leu	Arg	Lys	Val
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<211> 1569

<212> DNA

<213> Homo sapiens

<400> 2633

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<211> 59

<212> PRT

<213> Homo sapiens

<400> 2634

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<210> 2635

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 2635

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<211> 63
 <212> PRT
 <213> Homo sapiens

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<210> 2638

<211> 263

<212> PRT

<213> Homo sapiens

<400> 2638

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Arg	Asp	Leu	Trp	Met	Phe	Ile	Phe	Ser	Asp	Thr	Met	Leu	Leu	Asn	Ile
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Pro	Leu	Val	Met	Asn	Asn	Glu	Arg	His	Lys	Gly	Glu	Met	Ala	Tyr	Ile
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Ile	Phe	Gln	Gln	Thr	Pro	Leu	Gly	Arg	Phe	Leu	Ala	Gln	Leu	His	Gly
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Leu	Thr	Met	Arg	Val	Ser	Thr	Glu	Glu	Glu	Leu	Lys	Phe	Leu	Gln	Met
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<212> DNA

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<212> DNA

<213> Homo sapiens

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<210> 2646

<211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2646

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Ala	Arg	Trp	Glu	His	Lys	Thr	Arg	Lys	Leu	Ser	Arg	Ala	Phe	Gly	Ser
		35					40					45			
Pro	Tyr	Leu	Ala	Cys	Tyr	Ser	Leu	Ser	Ile	Thr	Ile	Leu	Leu	Leu	Asn
	50					55					60				
Phe	Leu	Arg	Ser	His	Cys	Phe	Thr	Gln	Ala	Met	Leu	Ser	Gln	Pro	Arg
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Met	Glu	Ser	Leu	Asp	Thr	Pro	Ala	Ala	Tyr	Ser	Leu	Gly	Leu	Ala	Leu
				85					90					95	
Leu	Gly	Leu	Gly	Val	Val	Leu	Val	Leu	Ser	Ser	Phe	Phe	Ala	Leu	Gly
			100					105					110		
Phe	Ala	Gly	Thr	Phe	Leu	Gly	Asp	Tyr	Phe	Gly	Ile	Leu	Lys	Glu	Ala
		115					120					125			
Arg	Val	Thr	Val	Phe	Pro	Phe	Asn	Ile	Leu	Asp	Asn	Pro	Met	Tyr	Trp
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Gly	Ser	Thr	Ala	Asn	Tyr	Leu	Gly	Trp	Ala	Ile	Met	His	Ala	Ser	Pro
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Thr	Gly	Leu	Leu	Leu	Thr	Val	Leu	Val	Ala	Leu	Thr	Tyr	Ile	Met	Ala
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Leu	Leu	Tyr	Glu	Pro	Phe	Thr	Ala	Glu	Ile	Tyr	Arg	Gln	Lys	Ala	
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<210> 2647
 <211> 1368
 <212> DNA
 <213> Homo sapiens

<400> 2647

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480

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<211> 389

<212> PRT

<213> Homo sapiens

<400> 2648

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50 55 60
Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu Glu
65 70 75 80
Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly
85 90 95
Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu
100 105 110
Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile Glu
115 120 125
Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser Leu

130		135		140
Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val Gln				
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Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp				160
	165		170	175
Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met				
	180		185	190
Lys Val Tyr Arg Arg Glu Val Glu Asn Gly Ile Val Leu Asp Pro				
	195	200		205
Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys				
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Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile				
225		230		235
Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile				240
	245		250	255
Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu				
	260		265	270
Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro				
	275	280		285
Glu Thr Trp Ile Val Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro				
	290	295		300
Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys				
305		310		315
Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp				
	325		330	335
Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly				
	340		345	350
Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro				
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Lys Phe Leu Lys Arg Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly				
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<210> 2649

<211> 1299

<212> DNA

<213> Homo sapiens

<400> 2649

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<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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			20					25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
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Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
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Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
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Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
			85						90					95	
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
			100					105					110		
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
			115					120					125		
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

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Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu				160
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Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val				
	180		185	190
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr				
	195		200	205
Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys				
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Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys				
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Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser				240
	245		250	255
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala				
	260		265	270
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser				
	275		280	285
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg				
	290		295	300
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly				
305		310		315
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val				320
	325		330	335
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys				
	340		345	350
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly				
	355		360	365
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp				
	370		375	380
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile				
385		390		395
Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys				400
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<210> 2651

<211> 628

<212> DNA

<213> Homo sapiens

<400> 2651

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180

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 <211> 209
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Lys Asp Gly His Glu Val Arg Thr Cys Lys Val Ala Asp Lys Thr Gly
 50 55 60
 Ser Ile Asn Ile Ser Val Trp Asp Asp Val Gly Asn Leu Ile Gln Pro
 65 70 75 80
 Gly Asp Ile Ile Arg Leu Thr Lys Gly Tyr Ala Ser Val Phe Lys Gly
 85 90 95
 Cys Leu Thr Leu Tyr Thr Gly Arg Gly Gly Asp Leu Gln Lys Ile Gly
 100 105 110
 Glu Phe Cys Met Asp Tyr Ser Glu Val Pro Asn Phe Ser Glu Pro Asn
 115 120 125
 Pro Glu Tyr Ser Thr Gln Gln Ala Pro Asn Lys Ala Val Gln Asn Asp
 130 135 140
 Ser Asn Pro Ser Ala Ser Gln Pro Thr Thr Gly Pro Ser Ala Ala Ser
 145 150 155 160
 Pro Ala Ser Glu Asn Gln Asn Gly Asn Gly Met Ser Ala Pro Pro Gly
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 Ala Pro Glu Ser Leu Glu Ala Ser Pro Thr Thr His Leu Gln Ala Arg
 195 200 205
 Leu

<210> 2653
 <211> 2103
 <212> DNA
 <213> Homo sapiens

<400> 2653

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 <211> 70
 <212> PRT
 <213> Homo sapiens

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 <211> 1752
 <212> DNA
 <213> Homo sapiens

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<210> 2656

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2656

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20      25      30
Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
35      40      45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
50      55      60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
65      70      75      80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
85      90      95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
100     105     110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
115     120     125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
130     135     140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
145     150     155     160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
165     170     175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
180     185     190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
195     200     205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
210     215     220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
225     230     235     240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
245     250     255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
260     265     270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
275     280     285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
290     295     300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305     310     315     320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
325     330     335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
340     345     350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
355     360     365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
370     375     380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
385     390     395     400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
405     410     415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

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	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435		440		445										
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450		455		460										
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
465			470		475				480						
Thr	Lys	Ile	Glu	Asn	Glu	Leu	Lys	Asp	Leu	Glu	Lys	Lys			
	485		490												

<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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120
gtcctgttgt ctaagggccca aggggcagta gcccctctc caggggccct gagcacagag
180
gcgtcagatc agagttgccca tcttcaactt gatatgcccc ccacatccca gcagctctgt
240
gggcccaggc tactggcatc cacatgactc ccagggcctg agtccacact gcctgaggac
300
aggagcctca aaactgaaat gcacgtgctt cggaccagcc atccgtgcct gacaatgtcc
360
tatggaaaca cccacacgtg tgcagatcgc tgcaatgaaa ggggtccgtca tggggttggg
420
taattccagc tgggaccgcc taggagcgcc atgcagctgt gggaacaagg ttgctgtcca
480
cacagacatg aagggtattcc ccgtggaatg aggttagaaa aggaagggca agagtggacg
540
tataagatgc cccatgctgt gtgaaaactg ccatgagaga gagacggagg aagggggaga
600
aagtgggaga cagagaccaa catctgcact gcctgtgcct gccacactct cccctcgggg
660
ccagaggggtg gcctctgggg aggggctggc gagaggggat gccaggcctg ggctgcagca
720
gacttgggtg gtcattggagg atccatgcca tcaacggcag gctgggggtgc cctccccggg
780
ccagcaccaa gcatgcatgg ttggtgatgt ggaacttacg cagagcgtgg cggctgggca
840
ggcggctgtg caggggctgg gcatggatat acagggctcg gtagaactcc tggcagtccc
900
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960
tggggttccg ga
972

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<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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Glu Arg Asp Gly Gly Arg Gly Arg Lys Trp Glu Thr Glu Thr Asn Ile
 1           5           10           15
Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
 20           25           30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
 35           40           45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
 50           55           60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
 65           70           75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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aattcatttt aagaattatt atgatctgaa tgtgaggctg aagaggaaca gaaaagaaag
120
aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg
180
cagagggtgg aggcctccc gagggccgtt ccgcagaacc tgccacagcc acagatgcca
240
ccctatgcct tcgcgcaccc acccttcccc ctgcctcccg tgcggcctgt gttcaacaac
300
ttcccactca acatggggcc tatcccagcc ccgtacgtgc cccctctgcc caacgtgcgg
360
gtcaactatg acttcgggtcc catccacatg cccctggagc acaacctgcc catgcacttt
420
ggccccccagc cgcggcatcg cttctgatgg ccccgaaatcc ccattgagca gcacaaagcc
480
cgtttggggg aggagtgtgg atggagaacc ctcccccaag gctggtgtct gtaccattgc
540
atcctaagtc agcttgaagg gtaggctggt tttcttccca ccccttctct agaagggtta
600
ctgctcctgg aagagtggac ggatccataa taaagacgtc ccaaattggtg aaaaaaaaaa
660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
691

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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Ser Glu Cys Glu Ala Glu Glu Glu Gln Lys Arg Lys Asn Gly Glu Asn
 1           5           10           15
Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

```

	20		25		30										
Gln	Arg	Val	Glu	Ala	Leu	Pro	Arg	Pro	Val	Pro	Gln	Asn	Leu	Pro	Gln
	35						40				45				
Pro	Gln	Met	Pro	Pro	Tyr	Ala	Phe	Ala	His	Pro	Pro	Phe	Pro	Leu	Pro
	50					55					60				
Pro	Val	Arg	Pro	Val	Phe	Asn	Asn	Phe	Pro	Leu	Asn	Met	Gly	Pro	Ile
65					70					75				80	
Pro	Ala	Pro	Tyr	Val	Pro	Pro	Leu	Pro	Asn	Val	Arg	Val	Asn	Tyr	Asp
			85					90					95		
Phe	Gly	Pro	Ile	His	Met	Pro	Leu	Glu	His	Asn	Leu	Pro	Met	His	Phe
	100							105					110		
Gly	Pro	Gln	Pro	Arg	His	Arg	Phe								
	115						120								

<210> 2661

<211> 1395

<212> DNA

<213> Homo sapiens

<400> 2661

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 120
 gaattagaca gattttctgt tttgaatagc caacacatgt ttgaagtact agctgccatg
 180
 aatcacccgat ctcttatact cctggatgaa tgcagtaagg tggtcctaga taatatccat
 240
 ggggtgcctt taagaataat gatcaacata ttgcagtcct gcaaagacct ccagtaccat
 300
 aatttggatc tcttcaaggg acttgcagat tatgtggctg caactttcga catctggaag
 360
 ttcagaaaag ttctttttat cctcatttta tttgaaaacc ttggctttcg acctgttggt
 420
 ttaatggacc tgtttatgaa gagaatagta gaggatcctg aatccctaaa catgaaaaac
 480
 attctatcta ttcttcatac ttactcttct ctcaatcatg tctacaaatg ccagaacaaa
 540
 gaacagttcg tggaagttat ggctagtgtc ctgactgggt atcttcacac tatttcttct
 600
 gaaaacttat tggatgcagt atattcattt tgcttgatga attactttcc cctggctcct
 660
 ttaatcagc ttctgcaaaa agacatcatc agtgagctgc tgacatcaga tgacatgaag
 720
 aatgcttaca agctgcatac tttggatact tgtctaaaac ttgatgatac tgtctatctg
 780
 agggacatag ccttgtcact cccacagctg ccgcgggagc tgccatcgtc acatacaaat
 840
 gcaaagggtg cagaggtgct gagcagcctt ctgggaggtg aaggacactt ctcaaaggat
 900
 gtgcacttgc cacacaatta tcatattgat tttgaaatca gaatggacac taacaggaat
 960
 caagtgtac cactttctga tgtggataca acttctgcta cagatattca aagagtagct
 1020

gtgctatgtg tttccagatc tgcttattgt ttgggttcaa gccaccccag aggattcctt
 1080
 gctatgaaaa tgcggcattt gaatgcaatg ggttttcatg tgatcttggt caataactgg
 1140
 gagatggaca aactagagat ggaagatgca gtcacatttt tgaagactaa aatctattca
 1200
 gtagaagctc ttcctgttgc tgctgtaaat gtgcaaagca cacaataaag tgaaaatcaa
 1260
 ccttttcata ttaggagaca tgcatttgta aaaattaata aagatgacaa gtcagttgtc
 1320
 aatggaattg agctatctgc taagacaaaa aatgttacct cagttcacta ttaaaattaa
 1380
 ttttaggagt ggaaa
 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

Leu	Val	Asp	Gln	Gln	Val	Trp	Lys	Ile	Glu	Asp	Val	Phe	Thr	Leu	Gln
1			5						10					15	
Val	Val	Met	Lys	Cys	Ile	Gly	Lys	Asp	Ala	Pro	Ile	Ala	Leu	Lys	Arg
		20						25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
		35					40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
		50				55					60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
65				70						75				80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
				85					90					95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
		115					120					125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
		130				135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
145				150						155				160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
				165					170					175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
			180					185					190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
		195				200						205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
		210				215					220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
225				230						235				240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
				245					250					255	
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

			260					265					270			
Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser	
			275					280					285			
Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro	
			290					295					300			
His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn	
305					310					315					320	
Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile	
			325					330					335			
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly	
			340					345					350			
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn	
		355					360					365				
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys	
	370					375					380					
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser	
385					390					395					400	
Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln		
			405					410					415			

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<210> 2663
<211> 1024
<212> DNA
<213> Homo sapiens
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<400> 2663
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120
ctcggcaata ttgattttag acaggcagac ttctgcgtta tgaccgggct gctgggctac
180
gtggaccccc tggatcccag ctttgtggct gccgtcatca ccatcacctt caatccgctc
240
tactggaatg tggttgcacg atgggaacac aagaccgcga agctgagcag ggccttcgga
300
tccccctacc tggcctgcta ctctctaagc gtcaccatcc tgctcctgaa cttcctgcgc
360
tcgcactgct tcacgcaggc catgctgagc cagcccagga tggagagcct ggacaccccc
420
gcggcctaca gcctgggect cgcgctcctg ggactgggcg tcgtgctcgt gctctccagc
480
ttctttgcac tggggttcgc tggaaactttc ctaggtgatt acttcgggat cctcaaggag
540
gcgagagtga ccgtgttccc cttcaacatc ctggacaacc ccatgtactg gggaagcaca
600
gccaactacc tgggctgggc catcatgcac gccagcccca cgggcctgct cctgacggtg
660
ctggtggccc tcacctacat aatggctctc ctatacgaag agcccttcac cgctgagatc
720
taccggcaga aagcctccgg gtcccacaag aggagctgat tgagctgcaa cagctttgct
780
gaaggcctgg ccagcctccc tcgtgcccc agtggcaggc cctgcgcagg gcgagaatgg
840

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tgccctgctgc tcagggcctc ccccggcgtg ggctgccccca gtgccttgga acctgctgcc
 900
 ttggggacccc tggacgtgcc gacatatggc cattgagctc caaccacac attcccatc
 960
 accaataaag gcaccctgac ccaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1020
 aaaa
 1024

<210> 2664
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2664
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 Ala Ala Val Ile Thr Ile Thr Phe Asn Pro Leu Tyr Trp Asn Val Val
 20 25 30
 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
 165 170 175
 Leu Leu Tyr Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
 180 185 190
 Ser Gly Ser His Lys Arg Ser
 195

<210> 2665
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 2665
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 120
 gcgccaatgc gaagcgttgc agtcgcttga ctacctgag gctctccaag gataccttca
 180

atgcctgcac tgtaagggag ctgcttttcc cgggtgctgg cgagaacgga agccttcctt
 240
 tgacgttttt ctaaacaatgg gatgcagtct gtgcagcctg cagaagcaag aggagcagta
 300
 caaattactt atgaagtttg tcaggtcaac ggcagagact tatccagagc aactcatgac
 360
 caggctgtgg aagcttttcaa gacagccaag gagcccatag tgggtgcaggt gttgagaaga
 420
 acaccaagga ccaaaatggt cacgcctcca tcagagtctc agctggtgga cacgggaacc
 480
 caaaccgaca tcacctttga acatatcatg gccctcacta agatgtcctc tcccagccca
 540
 cccgtgctgg atccctatct cttgccagag gagcatccct cagcccatga atactacgat
 600
 ccaaatagact acattggaga catccatcag gagatggaca gggaggagct ggagctggag
 660
 gaagtggacc tctacagaat gaacagccag gacaagctgg gcctcactgt gtgctaccgg
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<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

Met	Gln	Ser	Val	Gln	Pro	Ala	Glu	Ala	Arg	Gly	Ala	Val	Gln	Ile	Thr
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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20					25					30		
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
			35				40					45			
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
			50			55					60				
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65					70				75					80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
				85				90						95	
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
			100					105					110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
		115					120					125			
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
		130				135					140				
Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
145					150										

<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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gccagagacg cggaacaatt gagcaagaac aaggggaacc ctttttctgt ttgtccccga
 120
 tgggtgccag gcctatgttg gaggacaaga catttcaaag aaagtattaa attcattcac
 180
 gagtgccggc tccgcgggga gagctgcctt gtacactgcc tggccgggggt ctccaggagc
 240
 gtgacactgg tgatcgcata catcatgacc gtcactgact ttggctggg
 289

<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

Xaa	Met	Gly	Asn	Gly	Met	Asn	Lys	Ile	Leu	Pro	Gly	Leu	Tyr	Ile	Gly
1				5					10					15	
Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
			20					25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
		35					40					45			
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
	50					55					60				
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65					70					75				80	
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
				85					90					95	

<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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 120
 gatctggcga cctcggggcg gcgcctaaga ggtcagactg cggagcctgc gggtcgccag
 180
 cggccccgcc gagagccgga ggcaatggat gaacagagcg tggagagcat tgctgagggt
 240
 ttccgatgtt tcatttgtat ggagaaattg cgggatgcac gcctgtgtcc tcattgctcc
 300
 aaactgtgtt gtttcagctg tattaggcgc tggctgacag agcagagagc tcaatgtcct
 360
 cattgccgtg ctccactcca gctacgagaa ctagtaaatt gtcgttgggc agaagaagta
 420
 acacaacagc ttgatactct tcaactctgc agtctcacca aacatgaaga aaatgaaaag
 480
 gacaaatgtg aaaatcacca tgaaaaactt agtgtatttt gctggacttg taagaagtgt
 540
 atctgccatc agtgtgcact ttggggagga atgcatggcg gacatacctt taaacctttg
 600

gcagaaatTT atgagcaaca cgtcactaaa gtgaatgaag aggtagccaa acttcgtcgg
 660
 cgtctcatgg aactgatcag cttagttcaa gaagtggaaa ggaatgtaga agctgtaaga
 720
 aatgcaaaaag atgagcgtgt tcgggaaatt aggaatgcag tggagatgat gattgcacgg
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<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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Gln Ser Gly Ser Arg His Ser	Ser Pro Arg Ala Leu Ile His Gly Ser	
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<212> DNA

<213> Homo sapiens

<400> 2671

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Lys	Asp	Ser	Arg	Ala	Val	Ser	Arg	His	Gly	Arg	Gly	Asn	Cys	Gly	Ala
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<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

Ala	Ala	Gly	Phe	Arg	Ala	Met	Ile	Pro	Pro	Gln	Glu	Ala	Ser	Ala	Arg
1				5					10					15	
Arg	Arg	Glu	Ile	Glu	Asp	Lys	Leu	Lys	Gln	Glu	Glu	Glu	Thr	Leu	Ser
			20					25					30		
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
		35					40					45			
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
	50					55					60				
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
65					70					75					80
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
				85					90					95	
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
			100					105					110		
Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala
		115					120					125			
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys
	130					135					140				
Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
145					150					155					160
Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile
			165					170						175	
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val
			180				185						190		
Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile
		195					200					205			
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
	210					215					220				
Tyr	Tyr	Gln	Ile	Arg	Ser	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu
225					230					235					240
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
			245					250						255	
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val

			260					265					270			
Lys	Arg	Pro	Gly	Thr	Ile	Arg	Lys	Ala	Gln	Asn	Leu	Leu	Lys	Gln	Tyr	
			275				280					285				
Ser	Gln	His	Gly	Leu	Asp	Gly	Lys	Lys	Gly	Gly	Ser	Asn	Leu	Ile	Pro	
			290			295					300					
Leu	Glu	Gly	Arg	Asp	Asp	Met	Leu	Asp	Val	Glu	Thr	Asp	Ala	Tyr	Ile	
305					310					315					320	
His	Cys	Val	Ser	Ala	Phe	Val	Lys	Leu	Ala	Gln	Ser	Glu	Tyr	Gln	Leu	
				325					330					335		
Leu	Ala	Asp	Ile	Ile	Pro	Glu	His	His	Gln	Lys	Lys	Thr	Phe	Asp	Ser	
			340					345					350			
Leu	Ile	Gln	Asp	Ala	Leu	Asp	Gly	Leu	Met	Leu	Glu	Gly	Glu	Asn	Ile	
		355					360					365				
Val	Ser	Ala	Ala	Arg	Lys	Ala	Ile	Val	Arg	His	Asp	Phe	Ser	Thr	Val	
			370			375					380					
Leu	Thr	Val	Phe	Pro	Ile	Leu	Arg	His	Leu	Lys	Gln	Thr	Lys	Pro	Glu	
385					390					395					400	
Phe	Asp	Gln	Val	Leu	Gln	Gly	Thr	Ala	Ala	Ser	Thr	Lys	Asn	Lys	Leu	
				405					410					415		
Pro	Gly	Leu	Ile	Thr	Ser	Met	Glu	Thr	Ile	Gly	Ala	Lys	Ala	Leu	Glu	
			420					425					430			
Asp	Phe	Ala	Asp	Asn	Ile	Lys	Asn	Asp	Pro	Asp	Lys	Glu	Tyr	Asn	Met	
		435					440					445				
Pro	Lys	Asp	Gly	Thr	Val	His	Glu	Leu	Thr	Ser	Asn	Ala	Ile	Leu	Phe	
		450				455					460					
Leu	Gln	Gln	Leu	Leu	Asp	Phe	Gln	Glu	Thr	Ala	Gly	Ala	Met	Leu	Ala	
465					470					475					480	
Ser	Gln	Glu	Thr	Ser	Ser	Ser	Ala	Thr	Ser	Tyr	Ser	Ser	Glu	Phe	Ser	
				485					490					495		
Lys	Arg	Leu	Leu	Ser	Thr	Tyr	Ile	Cys	Lys	Val	Leu	Gly	Asn	Leu	Gln	
			500					505					510			
Leu	Asn	Leu	Leu	Ser	Lys	Ser	Lys	Val	Tyr	Glu	Asp	Pro	Ala	Leu	Ser	
		515					520					525				
Ala	Ile	Phe	Leu	His	Asn	Asn	Tyr	Asn	Tyr	Ile	Leu	Lys	Ser	Leu	Glu	
		530				535					540					
Lys	Ser	Glu	Leu	Ile	Gln	Leu	Val	Ala	Val	Thr	Gln	Lys	Thr	Ala	Glu	
545					550					555					560	
Arg	Ser	Tyr	Arg	Glu	His	Ile	Glu	Gln	Gln	Ile	Gln	Thr	Tyr	Gln	Arg	
				565					570					575		
Ser	Trp	Leu	Lys	Val	Thr	Asp	Tyr	Ile	Ala	Glu	Lys	Asn	Leu	Pro	Val	
			580					585					590			
Phe	Gln	Pro	Gly	Val	Lys	Leu	Arg	Asp	Lys	Glu	Arg	Gln	Ile	Ile	Lys	
		595					600					605				
Glu	Arg	Phe	Lys	Gly	Phe	Asn	Asp	Gly	Leu	Glu	Glu	Leu	Cys	Lys	Ile	
		610				615</										

690

<210> 2675

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2675

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agatctcagt gaagaggacc cttgttcact gtacctcatc aacttcctcc tggacgccac
60
tgtgggcatg ctgctcatct acgtgggggt gcgcgccgtc agcgtcctgg tagagtggca
120
gcagtgggag tccctgcgct tcggcgaaata tggagaccct ctgcagtgtg gagcctgggt
180
cgggcagtgc gctctttaca tcgtgatcat gatttttgaa aagtctgtcg tcttcacgt
240
cctcctccta ctccagtgga aaaaggtggc cctattgaat ccaattgaaa accccgacct
300
gaagctggcc atcgtcatgc tgatcgtecc cttctttgtc aacgctttga tgttttgggt
360
agtggacaat ttcctcatga gaaaggggaa gacgaaagct aagctagaag aaaggggagc
420
caaccaggac tcgaggaatg ggagcaaggt ccgctaccgg agggccgcat cccacgagga
480
gtctgagtct gagatcctga tctcagcgga tgatgagatg gaggagtccg acgtggagga
540
ggacctccgc agactgaccc ccctcaagcc tgtgaagaaa aagaagcacc gctttgggct
600
acccgtatga cacattccca tgctgggggt gacgggaggg ccccgccagc cgctgggtgtg
660
cagaggtcat cccacagcat cgttccttac cctctctctg cccttcaccc g
711

```

<210> 2676

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2676

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Met Leu Leu Ile Tyr Val Gly Val Arg Ala Val Ser Val Leu Val Glu
1           5           10          15
Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
20          25          30
Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
35          40          45
Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Gln Trp
50          55          60
Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
65          70          75          80
Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
85          90          95
Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
100         105         110
Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

```

	115					120					125				
Arg	Tyr	Arg	Arg	Ala	Ala	Ser	His	Glu	Glu	Ser	Glu	Ser	Glu	Ile	Leu
	130					135					140				
Ile	Ser	Ala	Asp	Asp	Glu	Met	Glu	Glu	Ser	Asp	Val	Glu	Glu	Asp	Leu
145					150					155					160
Arg	Arg	Leu	Thr	Pro	Leu	Lys	Pro	Val	Lys	Lys	Lys	Lys	His	Arg	Phe
				165					170					175	
Gly	Leu	Pro	Val												
			180												

<210> 2677

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2677

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ngcgcgccag gaccgctcct gcaccgaggg tgcccgcgcg gctatggagg ccttccagag
60
ggccgctggt gagggcggcc cgggccgcgg tggggcacgg cgcggtgccg ggggtgttgca
120
gagccccctt tgcagggcag gagctgggga gtggttagga catcagtccc tcaggtaggg
180
ggagtgaaca catcagggtc atatgtgtcc caggagcatc cctagctggc cgccctgagt
240
gctgcatggg gcagagatgg gcaggtacac ggccctgcct gtgtgagcac ccctccctcc
300
gctggggcct tcagcctcct gagggagaac ttctcccatg cgccgagccc agacatgagc
360
gctgctgccc tctgcgcact ggagcagctc atgatggccc agggccagga atgtgtgttt
420
gagggcctct caccacctgc ctccatggcc cccaagact gcctggccca gctgcgcctg
480
gcgcaggagg ccgcccaggt gagctcgggc acccgtgtca ggatgcaggg ggtggggccg
540
agctgggggtc agagcccagg tccaggcatg cgtgagctct cccacctcct tccttgtgtg
600
tcagccccga gccagctgtt gtcctgctcc ctgggggggc tggtcaggaa cctggggacc
660
cgagcctctg cctccaggga atggcacaaa gcagcaggaa ctgaggtgcc agggaggctg
720
ctgggatggg ggtcg
735

```

<210> 2678

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2678

Leu	Ala	Ala	Leu	Ser	Ala	Ala	Trp	Gly	Arg	Asp	Gly	Gln	Val	His	Gly
1				5				10					15		
Pro	Ala	Cys	Val	Ser	Thr	Pro	Pro	Ser	Ala	Gly	Ala	Phe	Ser	Leu	Leu
			20					25				30			
Arg	Glu	Asn	Phe	Ser	His	Ala	Pro	Ser	Pro	Asp	Met	Ser	Ala	Ala	Ser

```

          35          40          45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
          50          55          60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
65          70          75          80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
          85          90          95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
          100          105          110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
          115          120          125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
          130          135          140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
145          150          155          160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
          165          170

```

<210> 2679
 <211> 560
 <212> DNA
 <213> Homo sapiens

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<400> 2679
agccgcccc cctcctgttc cattataatc ttattttggt tatgttgata caacacaatc
60
tgtccttcca agtgatcacc ggagtccaga tattttctgtc aagtcagcca accaggaagg
120
ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga
180
cgctcaccg cacaggaggg ctgacccag ggaaacgtgt caccaggaca cagcacgaag
240
ctcaaaaggg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactctagtg agcgtgcag cagccagcag gccctggatg gccaggtgtg cagtggggag
360
gcacaggggg tgcaccagga cgcagccaga cctgggccag ttgcgcccga ctcttctcca
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
480
agatcaacta actattcagg ttgaaccaga ggctggggcg ggggcatcca actgccacc
540
cgtcagactg agggacgct
560

```

<210> 2680
 <211> 133
 <212> PRT
 <213> Homo sapiens

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<400> 2680
Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
1          5          10          15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

[illegible]

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<210> 2681
<211> 585
<212> DNA
<213> Homo sapiens
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<400> 2681
gattctctag tagccctaatt tctacccatc tggctactaa ttcaaacttt cttccttcac
60
atctgtttgt ggaacttctcc aatataacta gtatgcctgg gctcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atgggggcaag cctcacaagc
180
cccgagggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
240
ctcttcgctc tttcctgggc tgtgtcacta cagctctgac tcctttccac cttggagttt
300
agcttccctg ccaggaaagc taaggagtag gagttgttct tggaaacaaa tgccgagcga
360
tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
420
ggacaacggt ccagatttgt tttcagtact aatgggttcat ctcttttttt ctgttcatcc
480
attttccctt tcctgttttc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttccct cttgtaactt ttcttctctc agctttctca agctt
585

```

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<210> 2682
<211> 116
<212> PRT
<213> Homo sapiens
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<400> 2682

Met	Asp	Glu	Gln	Lys	Lys	Arg	Asp	Glu	Pro	Leu	Val	Leu	Lys	Thr	Asn
1				5					10					15	
Leu	Glu	Arg	Cys	Pro	Ala	Arg	Leu	Ser	Asp	Ser	Glu	Asn	Glu	Glu	Pro
			20					25					30		
Ser	Arg	Gly	Gln	Met	Thr	Gln	Thr	His	Arg	Ser	Ala	Phe	Val	Ser	Lys

	35					40					45				
Asn	Asn	Ser	Tyr	Ser	Leu	Ala	Phe	Leu	Ala	Gly	Lys	Leu	Asn	Ser	Lys
	50					55					60				
Val	Glu	Arg	Ser	Gln	Ser	Cys	Ser	Asp	Thr	Ala	Gln	Glu	Arg	Ala	Lys
65					70					75				80	
Ser	Arg	Val	Arg	Ala	Val	Pro	Gly	Asn	Lys	Ala	Lys	Val	His	Leu	Ser
				85				90					95		
His	Arg	Pro	Pro	Gly	Leu	Val	Arg	Leu	Ala	Pro	Ser	Pro	Pro	Leu	His
			100					105					110		
Met	Val	Met	Lys												
			115												

<210> 2683

<211> 498

<212> DNA

<213> Homo sapiens

<400> 2683

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nacgcgttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
60
atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtggtg gtcattctttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtcctgat ccttctgata cactgtgaca cctacctcca ccccccatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagcccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

```

<210> 2684

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2684

Met	Ala	Asn	Ile	Thr	Trp	Met	Ala	Asn	His	Thr	Gly	Arg	Leu	Asp	Phe
1			5						10				15		
Ile	Leu	Met	Gly	Leu	Phe	Arg	Arg	Ser	Lys	His	Pro	Ala	Leu	Leu	Ser
		20						25				30			
Val	Val	Ile	Phe	Val	Val	Phe	Leu	Met	Ala	Leu	Ser	Glu	Asn	Ala	Val
		35				40					45				
Leu	Ile	Leu	Leu	Ile	His	Cys	Asp	Thr	Tyr	Leu	His	Thr	Pro	Met	Tyr
	50				55					60					
Phe	Phe	Ile	Ser	Gln	Leu	Ser	Leu	Met	Asp	Met	Ala	Tyr	Ile	Ser	Val
65				70					75					80	
Thr	Val	Pro	Lys	Met	Leu	Leu	Asp	Gln	Val	Met	Gly	Val	Asn	Lys	Ile

```

      85              90              95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100              105              110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115              120              125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130              135              140
Cys Leu Phe Leu Ala
145

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<210> 2685

<211> 391

<212> DNA

<213> Homo sapiens

<400> 2685

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ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaaggtcaag
60
cgcaatgagc tggctgcctt ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa
120
ctctacctca caggcaaccg actgcgaagc cgggccctgg gccccgtgc ctgggtggac
180
ctcgcccatc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg
240
ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttctgccc
300
agcgcccttg actctactcc caacctcaag gggatctttc tcaggttcaa caagctggct
360
gtgggctccg tagtagaaag cgccttccgg a
391

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<210> 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

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Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
1      5      10      15
Leu Lys Val Lys Arg Asn Glu Leu Ala Leu Ala Arg Gly Ala Leu
20     25     30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
35     40     45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
50     55     60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
65     70     75     80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
85     90     95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
100    105    110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
115    120    125
Phe Arg

```

130

<210> 2687

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2687

nagtgcaaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc
 60
 caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga
 120
 tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct
 180
 gacagtccgc taggccttat gttaagatac cggaaagata atgaaaggac caaacacaag
 240
 aaaagacagc aaatgataaa atattgctgg tttatttgga ctaaggaacc catcctgaaa
 300
 cctttggtct tttggccaca gttaggggtg agcggggact ggatatgcca actcctaate
 360
 cagtatgtaa aggataaaaag tccagtttct caagaggag
 399

<210> 2688

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1			5					10						15	
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
		20						25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
	35					40					45				
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50					55					60				
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65				70				75						80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
			85					90							

<210> 2689

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2689

gcacccattc aagttggggt agttggcttc tgtttggtgt ttgctacacc cctgtgttgt
 60
 gccctgtttc ctcaaaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc
 120
 tcaaaactct ggctcaaga aatcctcctg gttcagcctc acaaagctcc gagattacag
 180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc
 240
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc
 300
 tcattctgcc actgcaaagc tgggtgtagcc atgctggtga gaaaaatcct gttcaacctg
 360
 ggttggtata tcgtctttga aaaacaatga ctataaaagc tacaggaaag gtatttcagg
 420
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaactcaa
 480
 agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc
 540
 gaaacaagcc atcacgccag
 560

<210> 2690
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 2690
 Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe Ala Thr
 1 5 10 15
 Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Arg Tyr Lys Asn Val Gly
 20 25 30
 Leu Thr Lys Leu Pro Arg Leu Val Ser Asn Ser Trp Pro Gln Glu Ile
 35 40 45
 Leu Leu Val Gln Pro His Lys Ala Pro Arg Leu Gln Leu His Val Cys
 50 55 60
 Asp Lys Leu Gly Gly Arg Val Ala Ser
 65 70

<210> 2691
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 2691
 gatctcatct gtacacactt catggatggc atgaatgagc tggcgattgc ttacatcctg
 60
 cagggggtgc tgaaggccct cgactacatc caccacatgg gatatgtaca caggagtgtc
 120
 aaagccagcc acatcctgat ctctgtggat ggggaaggtct acctgtctgg tttgcgcagc
 180
 aacctcagca tgataagcca tgggcagcgg cagcgagtgg tccacgattt tcccaagtac
 240
 agtgtcaagg ttctgcctg gctcagcccc gaggtcctcc agcagaatct ccagggttat
 300
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 360
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<210> 2692
<211> 177
<212> PRT
<213> Homo sapiens

<400> 2692
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Val Asp Gly Lys Val Tyr Leu Ser Gly Leu Arg Ser Asn Leu Ser Met
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Ile Ser His Gly Gln Arg Gln Arg Val Val His Asp Phe Pro Lys Tyr
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Ser Val Lys Val Leu Pro Trp Leu Ser Pro Glu Val Leu Gln Gln Asn
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Ala Cys Glu Leu Ala Asn Gly His Val Pro Phe Lys Asp Met Pro Ala
115 120 125
Thr Gln Met Leu Leu Glu Lys Leu Asn Gly Thr Val Pro Cys Leu Leu
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<210> 2693
<211> 798
<212> DNA
<213> Homo sapiens

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<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
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	50					55					60				
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
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Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
			85						90					95	
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
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Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
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Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
		130				135						140			
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
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Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
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Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
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Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
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Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
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Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225				230						235					240
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
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260

265

<210> 2695

<211> 2265

<212> DNA

<213> Homo sapiens

<400> 2695

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<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

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			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
			35				40					45			
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
			50			55					60				
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
65					70				75					80	
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
				85				90					95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100					105					110		
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
			115				120					125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

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Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp				
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Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met				
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Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys				
	210	215	220	
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val				
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Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe				
	245	250	255	
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu				
	260	265	270	
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser				
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Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro				
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Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu				
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Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile				
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Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met				
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Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val				
	370	375	380	
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Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val				
	405	410	415	
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp				
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Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln				
	435	440	445	
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser				
	450	455	460	
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro				
465	470	475	480	
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser				
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Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala				
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Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn				
	515	520	525	
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg				
	530	535	540	
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala				
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<212> DNA
<213> Homo sapiens
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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2698

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Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
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Arg Gln Gly Ile Val Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
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Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
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Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
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Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
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<212> DNA

<213> Homo sapiens

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<211> 177

<212> PRT

<213> Homo sapiens

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Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
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Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
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Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
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Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100				105					110			
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

<400> 2702															
Met	Gly	Leu	Arg	Thr	Ser	Glu	Leu	Leu	Pro	Cys	Asn	Trp	Arg	Lys	Asp
1				5					10					15	
Leu	Gly	Pro	Gly	Asp	Gln	Glu	Ser	Arg	Trp	Lys	Gln	Tyr	Leu	Glu	Asp
			20					25					30		
Glu	Arg	Ile	Ala	Leu	Phe	Leu	Gln	Asn	Glu	Glu	Phe	Met	Lys	Glu	Leu
		35					40					45			
Gln	Arg	Asn	Arg	Asp	Phe	Leu	Leu	Ala	Leu	Glu	Arg	Asp	Arg	Leu	Lys
	50					55					60				
Tyr	Glu	Ser	Gln	Lys	Ser	Lys	Ser	Ser	Ser	Val	Ala	Val	Gly	Asn	Asp

65 70 75
Phe Gly Phe Ser Ser Pro Val Pro Gly Thr Gly Asp
 85 90

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<210> 2703
<211> 610
<212> DNA
<213> Homo sapiens
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<400> 2703
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180
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240
ggggaggggc ccaaagggga ggccccaag ttccctcttt tctttgatct ttctcttgct
300
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360
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420
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480
atcccttttc tgccctagga acgtgaggct ttaaggaaa ggaagattgg aggacttact
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cttcacgcgt
610

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<210> 2704
<211> 108
<212> PRT
<213> Homo sapiens
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<400> 2704
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Ser Val Val Ser Leu Ala Thr Gly Ala Gly Ala Ile Tyr Leu Leu Tyr
      20              25              30
Lys Ala Ile Lys Ala Gly Ile Lys Cys Lys Pro Pro Leu Cys Ser Asn
      35              40              45
Ser Pro Ile Cys Ile Ala Arg Glu Cys Ser Gly Pro Trp Gly Lys Gly
      50              55              60
Leu Leu Pro Pro Glu Gly Thr Leu Leu Pro Arg Pro Leu Leu Gly Glu
65              70              75              80
Gly Pro Lys Gly Glu Ala Ser Lys Phe Pro Leu Phe Phe Asp Leu Ser
      85              90              95
Leu Val His Leu Pro Gln Ala His Pro Ala Ala Ser
      100              105

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<210> 2705
 <211> 843
 <212> DNA
 <213> Homo sapiens

<400> 2705
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 gacatcaaca tccaggaacc tcgctgggac caaagtactt tcctgggcag agcccggcac
 180
 tttttcactg ttactgatcc tcgaaatctg ctgctgtccg gggcacagct ggaagcttct
 240
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 420
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 843

<210> 2706
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 2706
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 Thr Val Thr Asp Pro Arg Asn Leu Leu Leu Ser Gly Ala Gln Leu Glu
 35 40 45
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro
 50 55 60
 Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser
 65 70 75 80
 Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

				85				90					95		
Ser	Ala	Gln	Val	Pro	Met	Asn	Met	Thr	Ile	Thr	Gly	Cys	Met	Leu	Thr
			100					105					110		
Phe	Tyr	Arg	Lys	Thr	Pro	Thr	Val	Val	Phe	Trp	Gln	Trp	Val	Asn	Gln
		115					120					125			
Ser	Phe	Asn	Ala	Ile	Val	Asn	Tyr	Ser	Asn	Arg	Ser	Gly	Asp	Thr	Pro
		130				135					140				
Ile	Thr	Val	Arg	Gln	Leu	Gly	Thr	Ala	Tyr	Val	Ser	Ala	Thr	Thr	Gly
145					150					155					160
Ala	Val	Ala	Thr	Ala	Leu	Gly	Leu	Lys	Ser	Leu	Thr	Lys	His	Leu	Pro
				165					170					175	
Pro	Leu	Val	Gly	Arg	Phe	Val	Pro	Phe	Ala	Ala	Val	Ala	Ala	Ala	Asn
			180					185					190		
Cys	Ile	Asn	Ile	Pro	Leu	Met	Arg	Gln	Arg	Glu	Leu	Gln	Val	Gly	Ile
		195					200					205			
Pro	Val	Thr	Asp	Glu	Ala	Gly	Gln	Arg	Leu	Gly	His	Ser	Val	Thr	Ala
		210				215					220				
Ala	Lys	Gln	Gly	Ile	Phe	Gln	Val	Val	Val	Ser	Arg	Ile	Gly	Met	Ala
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<210> 2707
<211> 2921
<212> DNA
<213> Homo sapiens
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720
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780

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 2760
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<210> 2708

<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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		20						25					30		
Ala	Ala	Arg	Leu	Ala	Cys	Ser	Ala	Pro	Thr	Pro	Gly	Gly	Gly	Thr	Met
		35					40					45			
Pro	Phe	Asp	Phe	Arg	Arg	Phe	Asp	Ile	Tyr	Arg	Lys	Val	Pro	Lys	Asp
	50					55					60				
Leu	Thr	Gln	Pro	Thr	Tyr	Thr	Gly	Ala	Ile	Ile	Ser	Ile	Cys	Cys	Cys
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Leu	Phe	Ile	Leu	Phe	Leu	Phe	Leu	Ser	Glu	Leu	Thr	Gly	Phe	Ile	Thr
			85						90					95	
Thr	Glu	Val	Val	Asn	Glu	Leu	Tyr	Val	Asp	Asp	Pro	Asp	Lys	Asp	Ser
			100					105					110		
Gly	Gly	Lys	Ile	Asp	Val	Ser	Leu	Asn	Ile	Ser	Leu	Pro	Asn	Leu	His
		115					120					125			
Cys	Glu	Leu	Val	Gly	Leu	Asp	Ile	Gln	Asp	Glu	Met	Gly	Arg	His	Glu
		130				135					140				
Val	Gly	His	Ile	Asp	Asn	Ser	Met	Lys	Ile	Pro	Leu	Asn	Asn	Gly	Ala
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Gly	Cys	Arg	Phe	Glu	Gly	Gln	Phe	Ser	Ile	Asn	Lys	Val	Pro	Gly	Asn
			165					170						175	
Phe	His	Val	Ser	Thr	His	Ser	Ala	Thr	Ala	Gln	Pro	Gln	Asn	Pro	Asp
			180					185					190		
Met	Thr	His	Val	Ile	His	Lys	Leu	Ser	Phe	Gly	Asp	Thr	Leu	Gln	Val
		195					200					205			
Gln	Asn	Ile	His	Gly	Ala	Phe	Asn	Ala	Leu	Gly	Gly	Ala	Asp	Arg	Leu
	210					215						220			
Thr	Ser	Asn	Pro	Leu	Ala	Ser	His	Asp	Tyr	Ile	Leu	Lys	Ile	Val	Pro

225					230					235				240
Thr	Val	Tyr	Glu	Asp	Lys	Ser	Gly	Lys	Gln	Arg	Tyr	Ser	Tyr	Gln
				245					250				255	
Thr	Val	Ala	Asn	Lys	Glu	Tyr	Val	Ala	Tyr	Ser	His	Thr	Gly	Arg
			260					265				270		
Ile	Pro	Ala	Ile	Trp	Phe	Arg	Tyr	Asp	Leu	Ser	Pro	Ile	Thr	Val
		275					280				285			
Tyr	Thr	Glu	Arg	Arg	Gln	Pro	Leu	Tyr	Arg	Phe	Ile	Thr	Thr	Ile
	290					295					300			
Ala	Ile	Ile	Gly	Gly	Thr	Phe	Thr	Val	Ala	Gly	Ile	Leu	Asp	Ser
305					310					315				320
Ile	Phe	Thr	Ala	Ser	Glu	Ala	Trp	Lys	Lys	Ile	Gln	Leu	Gly	Lys
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His

<210> 2709
 <211> 984
 <212> DNA
 <213> Homo sapiens

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 420
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 480
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 660
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 720
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 780
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 840
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agtggccaaa catcagaatc gatt
984

<210> 2710
<211> 242
<212> PRT
<213> Homo sapiens

<400> 2710
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Gly Asp Lys Glu Lys Asp Thr Leu Lys Lys Gly Pro Ser Ser Thr Gly
35 40 45
Ala Ser Gly Gln Ala Lys Ser Ser Lys Glu Ser Lys Asp Ser Lys
50 55 60
Thr Ser Ser Lys Asp Asp Lys Gly Ser Thr Ser Ser Thr Ser Gly Ser
65 70 75 80
Ser Gly Ser Ser Thr Lys Asn Ile Trp Val Ser Gly Leu Ser Ser Asn
85 90 95
Thr Lys Ala Ala Asp Leu Lys Asn Leu Phe Gly Lys Tyr Gly Lys Val
100 105 110
Leu Ser Ala Lys Val Val Thr Asn Ala Arg Ser Pro Gly Ala Lys Cys
115 120 125
Tyr Gly Ile Val Thr Met Ser Ser Ser Thr Glu Val Ser Arg Cys Ile
130 135 140
Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu
145 150 155 160
Lys Val Lys Gly Asp Pro Ser Lys Lys Glu Met Lys Lys Glu Asn Asp
165 170 175
Glu Lys Ser Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp
180 185 190
Arg Ser Ser Lys Thr Gln Ala Ser Val Lys Lys Glu Glu Lys Arg Ser
195 200 205
Ser Glu Lys Ser Glu Lys Lys Glu Ser Lys Asp Thr Lys Lys Ile Glu
210 215 220
Gly Lys Asp Glu Lys Asn Asp Asn Gly Ala Ser Gly Gln Thr Ser Glu
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Ser Ile

<210> 2711
<211> 6536
<212> DNA
<213> Homo sapiens

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<211> 214

<212> PRT

<213> Homo sapiens

<400> 2714

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Lys	Ile	His	Val	Ile	Leu	Ala	Arg	Ser	Thr	Ser	Met	Pro	Gln	Leu	Gly
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210															

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<210> 2716
 <211> 126
 <212> PRT
 <213> Homo sapiens

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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Met
 35 40 45
 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly
 50 55 60
 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln
 65 70 75 80
 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn
 85 90 95
 Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu
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 35 40 45
 Thr Thr Gly Glu Gly Ala Gly His Arg Pro Leu Thr Ile Leu His Pro
 50 55 60
 Lys Thr Gly Gly Gln Gly Ser Asp Ala Thr Leu Leu Phe Val Lys Tyr
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 Ser Lys Trp Leu Lys Asn Ala Lys Cys Asn Tyr Thr Asp Leu
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 35 40 45
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys
 50 55 60
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr
 65 70 75 80
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly
 85 90 95
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln
 100 105 110
 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly
 115 120 125
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val
 130 135 140
 Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu
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 5640
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 5760
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 5880
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<210> 2722

<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

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Asp	Arg	Ser	Ala	Leu	Ala	Met	Trp	Leu	Asn	His	Leu	Glu	Asp	Arg	Thr
			20					25					30		
Ser	Thr	Ser	Phe	Gly	Gly	Gln	Asn	Arg	Gly	Arg	Ser	Asp	Ser	Val	Asp
		35					40					45			
Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Asp	Lys
	50					55					60				
Leu	Asn	Gly	Trp	Gln	Asn	Ser	Arg	Asp	Ser	Gly	Ile	Cys	Ile	Asn	Ala
65				70						75				80	
Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val	Pro
			85					90					95		
Leu	Tyr	Ser	Ser	Ser	Ser	Val	Pro	Thr	Thr	Ile	Asn	Thr	Ile	Gly	Thr
		100						105					110		
Ser	Thr	Ser	Thr	Asn	Val	Pro	Ala	Trp	Leu	Lys	Ser	Leu	Arg	Leu	His
		115					120					125			
Lys	Tyr	Ala	Ala	Leu	Phe	Ser	Gln	Met	Thr	Tyr	Glu	Glu	Met	Met	Ala
	130					135					140				
Leu	Thr	Glu	Cys	Gln	Leu	Glu	Ala	Gln	Asn	Val	Thr	Lys	Gly	Ala	Arg
145				150					155					160	
His	Lys	Ile	Val	Ile	Ser	Ile	Gln	Lys	Leu	Lys	Glu	Arg	Gln	Asn	Leu

												165						170						175							
Leu	Lys	Ser	Leu	Glu	Arg	Asp	Ile	Ile	Glu	Gly	Gly	Ser	Leu	Arg	Ile																
												180						185						190							
Pro	Leu	Gln	Glu	Leu	His	Gln	Met	Ile	Leu	Thr	Pro	Ile	Lys	Ala	Tyr																
												195			200						205										
Ser	Ser	Pro	Ser	Thr	Thr	Pro	Glu	Ala	Arg	Arg	Arg	Glu	Pro	Gln	Ala																
												210			215						220										
Pro	Arg	Gln	Pro	Ser	Leu	Met	Gly	Pro	Glu	Ser	Gln	Ser	Pro	Asp	Cys																
225												230						235			240										
Lys	Asp	Gly	Ala	Ala	Ala	Thr	Gly	Ala	Thr	Ala	Thr	Pro	Ser	Ala	Gly																
												245						250			255										
Ala	Ser	Gly	Gly	Leu	Gln	Pro	His	Gln	Leu	Ser	Ser	Cys	Asp	Gly	Glu																
												260			265						270										
Leu	Ala	Val	Ala	Pro	Leu	Pro	Glu	Gly	Asp	Leu	Pro	Gly	Gln	Phe	Thr																
												275			280						285										
Arg	Val	Met	Gly	Lys	Val	Cys	Thr	Gln	Leu	Leu	Val	Ser	Arg	Pro	Asp																
290												295						300													
Glu	Glu	Asn	Ile	Ser	Ser	Tyr	Leu	Gln	Leu	Ile	Asp	Lys	Cys	Leu	Ile																
305												310						315			320										
His	Glu	Ala	Phe	Thr	Glu	Thr	Gln	Lys	Lys	Arg	Leu	Leu	Ser	Trp	Lys																
												325						330			335										
Gln	Gln	Val	Gln	Lys	Leu	Phe	Arg	Ser	Phe	Pro	Arg	Lys	Thr	Leu	Leu																
												340			345						350										
Asp	Ile	Ser	Gly	Tyr	Arg	Gln	Gln	Arg	Asn	Arg	Gly	Phe	Gly	Gln	Ser																
												355			360						365										
Asn	Ser	Leu	Pro	Thr	Ala	Gly	Ser	Val	Gly	Gly	Gly	Met	Gly	Arg	Arg																
370												375						380													
Asn	Pro	Arg	Gln	Tyr	Gln	Ile	Pro	Ser	Arg	Asn	Val	Pro	Ser	Ala	Arg																
385												390						395			400										
Leu	Gly	Leu	Leu	Gly	Thr	Ser	Gly	Phe	Val	Ser	Ser	Asn	Gln	Arg	Asn																
												405			410						415										
Thr	Thr	Ala	Thr	Pro	Thr	Ile	Met	Lys	Gln	Gly	Arg	Gln	Asn	Leu	Trp																
												420			425						430										
Phe	Ala	Asn	Pro	Gly	Gly	Ser	Asn	Ser	Met	Pro	Ser	Arg	Thr	His	Ser																
												435			440						445										
Ser	Val	Gln	Arg	Thr	Arg	Ser	Leu	Pro	Val	His	Thr	Ser	Pro	Gln	Asn																
450												455						460													
Met	Leu	Met	Phe	Gln	Gln	Pro	Glu	Phe	Gln	Leu	Pro	Val	Thr	Glu	Pro																
465												470						475			480										
Asp	Ile	Asn	Asn	Arg	Leu	Glu	Ser	Leu	Cys	Leu	Ser	Met	Thr	Glu	His																
												485			490						495										
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<210> 2723

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 2723

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120
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cccaacacat tctggagtgc tgctgaggat gggcttatcc gccagtatga ccttcgagag
180
aacagcaaac actcggaggt gctgattgac ctgacagagt actgtggcca gctgggtggag
240
gccaagtgcc tcaactgtcaa cccccaggac aacaactgcc tggcagttgg ggccagcggg
300
cccttcgtga ggctctatga catccgcatg atccataacc acagaaagag catgaagcag
360
agcccttcag cgggtgtgca caccttctgt gaccggcaga aacccttcc ggacgggtgca
420
gcccagtatt acgtagcagg tcacctgcca gtgaagcttc ctgactacaa caaccgtttg
480
agagtgtctg ttgccaccta tgtgaccttc agccccaatg gcacagagct actagtcaac
540
atgggggggg aacaggtcta tttgtttgac ttgacttaca agcagcggcc gtacaccttc
600
ctcttgccca gaaaatgcc ctctcggggg gaagtccaga atggcaagat gtccaccaac
660
ggtgtgtcca acggtgtgtc caatggcctg caccttcata gcaatggctt cgggctgccg
720
gagagtaggg gacatgtcag cccccaagta gagctaccac catacctgga gcgtgtgaaa
780
cagcaagcca atgaggcttt tgcctgccag cagtggaccc aagccattca gctttacagc
840
aaggctgtgc agagggcccc tcacaatgcc atgctttatg gaaaccgagc agcagcctac
900
atgaagcgca agtgggatgg tgaccactat gatgcctga gggactgcct caaggccatc
960
tcctaaacc catgccacct gaaggcacac ttctgcctgg cccgctgcct ctttgagctc
1020
aagtatgtgg ctgaagccct ggagtgcctg gacgacttca aagggaaatt tccggagcag
1080
gcccacagca gcgcttgtga tgcattgggc cgcgacatca cagctgccct cttctctaaa
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1200
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1221

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<210> 2724

<211> 404

<212> PRT

<213> Homo sapiens

<400> 2724

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          20             25             30
Thr Ala Pro Met Trp Pro Asn Thr Phe Trp Ser Ala Ala Glu Asp Gly
          35             40             45
Leu Ile Arg Gln Tyr Asp Leu Arg Glu Asn Ser Lys His Ser Glu Val
          50             55             60
Leu Ile Asp Leu Thr Glu Tyr Cys Gly Gln Leu Val Glu Ala Lys Cys

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65					70					75				80	
Leu	Thr	Val	Asn	Pro	Gln	Asp	Asn	Asn	Cys	Leu	Ala	Val	Gly	Ala	Ser
				85					90					95	
Gly	Pro	Phe	Val	Arg	Leu	Tyr	Asp	Ile	Arg	Met	Ile	His	Asn	His	Arg
			100					105					110		
Lys	Ser	Met	Lys	Gln	Ser	Pro	Ser	Ala	Gly	Val	His	Thr	Phe	Cys	Asp
		115					120					125			
Arg	Gln	Lys	Pro	Leu	Pro	Asp	Gly	Ala	Ala	Gln	Tyr	Tyr	Val	Ala	Gly
		130				135					140				
His	Leu	Pro	Val	Lys	Leu	Pro	Asp	Tyr	Asn	Asn	Arg	Leu	Arg	Val	Leu
145					150					155					160
Val	Ala	Thr	Tyr	Val	Thr	Phe	Ser	Pro	Asn	Gly	Thr	Glu	Leu	Leu	Val
				165					170					175	
Asn	Met	Gly	Gly	Glu	Gln	Val	Tyr	Leu	Phe	Asp	Leu	Thr	Tyr	Lys	Gln
		180						185					190		
Arg	Pro	Tyr	Thr	Phe	Leu	Leu	Pro	Arg	Lys	Cys	His	Ser	Ser	Gly	Glu
		195					200					205			
Val	Gln	Asn	Gly	Lys	Met	Ser	Thr	Asn	Gly	Val	Ser	Asn	Gly	Val	Ser
		210				215					220				
Asn	Gly	Leu	His	Leu	His	Ser	Asn	Gly	Phe	Arg	Leu	Pro	Glu	Ser	Arg
225					230					235					240
Gly	His	Val	Ser	Pro	Gln	Val	Glu	Leu	Pro	Pro	Tyr	Leu	Glu	Arg	Val
				245					250					255	
Lys	Gln	Gln	Ala	Asn	Glu	Ala	Phe	Ala	Cys	Gln	Gln	Trp	Thr	Gln	Ala
			260					265					270		
Ile	Gln	Leu	Tyr	Ser	Lys	Ala	Val	Gln	Arg	Ala	Pro	His	Asn	Ala	Met
		275					280					285			
Leu	Tyr	Gly	Asn	Arg	Ala	Ala	Tyr	Met	Lys	Arg	Lys	Trp	Asp	Gly	
		290				295				300					
Asp	His	Tyr	Asp	Ala	Leu	Arg	Asp	Cys	Leu	Lys	Ala	Ile	Ser	Leu	Asn
305					310					315					320
Pro	Cys	His	Leu	Lys	Ala	His	Phe	Arg	Leu	Ala	Arg	Cys	Leu	Phe	Glu
				325				330						335	
Leu	Lys	Tyr	Val	Ala	Glu	Ala	Leu	Glu	Cys	Leu	Asp	Asp	Phe	Lys	Gly
			340					345					350		
Lys	Phe	Pro	Glu	Gln	Ala	His	Ser	Ser	Ala	Cys	Asp	Ala	Leu	Gly	Arg
		355					360					365			
Asp	Ile	Thr	Ala	Ala	Leu	Phe	Ser	Lys	Asn	Asp	Gly	Glu	Glu	Lys	Lys
		370				375					380				
Gly	Pro	Gly	Gly	Gly	Ala	Pro	Val	Arg	Leu	Arg	Ser	Thr	Ser	Arg	Lys
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Gly	Cys	Thr	Arg												

<210> 2725

<211> 856

<212> DNA

<213> Homo sapiens

<400> 2725

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120

aaggttctta aagaagtcag ggtgcaggat gagaacaacg tttgttttga gtgtggcgcg
180
ttcaatcctc agtgggtcag tgtgacctac ggcattctgga tctgcctgga gtgctcgggg
240
agacaccgcg ggcttggggg tccctcagc tttgtgcgct ctgttactat ggacaagtgg
300
aaggacattg agcttgagaa gatgaaagct ggtgggaatg ctaagttccg agagttcctg
360
gagtctcagg aggattacga tccttgctgg tccttgcaagg agaagtacaa cagcagagcc
420
gcggccctct ttagggataa ggtggtcgct ctggccgaag gcagagagtg gtctctggag
480
tcatcacctg cccagaactg gacccacct cagcccagga cgctgccgct catggtgcac
540
cggtagctgc tcctcgtggg gccttagtac agtttccact gggtcctgaa cttagtagat
600
tgggtttccc acagaattct ccccttcttt gctgttgtga cagctctttt cccagaagtc
660
agtgggaaaa acagcttttt aaaattgcc aacaataca agcttttagt aaatttggac
720
acccatagag ctgtctcaga tagcgcccca ggtaagctcc gcacgccttc caggtgtgca
780
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856

<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

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Asp	Glu	Asn	Asn	Val	Cys	Phe	Glu	Cys	Gly	Ala	Phe	Asn	Pro	Gln	Trp
			20					25					30		
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35					40					45			
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
	50					55					60				
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65				70					75					80	
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85						90					95	
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100						105					110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
		115					120					125			
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
	130					135					140				
Met	Val	His	Arg												
145															

<210> 2727
 <211> 1119
 <212> DNA
 <213> Homo sapiens

<400> 2727
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 120
 taaatctggg atattaaatt gtgctgtaaa tagatttgta tattttcttt tttgagtact
 180
 atgatagggtg aaatgggtatg actataaaaa ggatttggtt ctttttgtct cctggaatga
 240
 catgatgcct ttctagagaa agaaaaattg caggctacag gaaaatgata aaaactactg
 300
 gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa
 360
 gtgggggaaa gtctcagtct cccaggtagg tctcctctca cactgtcctg ggtggcaggc
 420
 gctgtttata catgcccgt atcgtctctg ctgcactgta gatcatctgc cgacggggaca
 480
 tcccagtaaa tgccatgtgc caatcagtcc ggctgacatt cagtaaaactc ttttccagga
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 cttcacccac tgtcaccaaa aggctgacc acctcagatt atagtctctg ggagtttagac
 600
 tttgagcctg ctgtacaaat tccaaaggca ctgggtgtggc ttgtgtaa at gtttctagat
 660
 gaatgccatg gacaggatct tcaaccacca aacaaccaat gtcaaaccat ttgtcaggca
 720
 gcaattctgc aatgaagttt tctactgaca cagctgtctg tttttcatgg atcaccccag
 780
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 840
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 900
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 960
 ccagttcacc tccagatttg atatagggag ccatgccagg gtccagcggt gtaatcatgc
 1020
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 1080
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 1119

<210> 2728
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2728
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 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

			20					25					30		
Glu	Leu	Asp	Ile	Val	Val	Thr	Ser	Asn	Lys	Glu	Val	Lys	Val	Ala	Ala
		35					40					45			
Val	Arg	Asp	Ala	Phe	Gln	Glu	Val	Phe	Gly	Leu	Ala	Val	Val	Val	Gly
	50					55					60				
Glu	Ala	Gly	Gln	Ser	Asn	Ile	Ala	Pro	Gln	Pro	Val	Gly	Tyr	Ala	Ala
65					70					75					80
Gly	Leu	Lys	Gly	Ala	Gln	Glu	Arg	Ile	Asp	Ser	Leu	Arg	Arg	Thr	Gly
				85					90					95	
Val	Ile	His	Glu	Lys	Gln	Thr	Ala	Val	Ser	Val	Glu	Asn	Phe	Ile	Ala
			100					105					110		
Glu	Leu	Leu	Pro	Asp	Lys	Trp	Phe	Asp	Ile	Gly	Cys	Leu	Val	Val	Glu
		115					120					125			
Asp	Pro	Val	His	Gly	Ile	His	Leu	Glu	Thr	Phe	Thr	Gln	Ala	Thr	Pro
	130					135					140				
Val	Pro	Leu	Glu	Phe	Val	Gln	Gln	Ala	Gln	Ser	Leu	Thr	Pro	Gln	Asp
145					150					155					160
Tyr	Asn	Leu	Arg	Trp	Ser	Gly	Leu	Leu	Val	Thr	Val	Gly	Glu	Val	Leu
				165					170					175	
Glu	Lys	Ser	Leu	Leu	Asn	Val	Ser	Arg	Thr	Asp	Trp	His	Met	Ala	Phe
			180					185					190		
Thr	Gly	Met	Ser	Arg	Arg	Gln	Met	Ile	Tyr	Ser	Ala	Ala	Arg	Ala	Ile
		195					200					205			
Ala	Gly	Met	Tyr	Lys	Gln	Arg	Leu	Pro	Pro	Arg	Thr	Val			
	210					215					220				

<210> 2729

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2729

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120

agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccaccctcc
180

agttctcttt cctcttccat actaagggcc tggcttgacc agtgtgcaga agacttccga
240

gagccccctc acttcccttg cttacagaaa ctgctggatt atctcacacg gatgatgccg
300

ggctctgacc cagaaagaag agcacaaaat cttcttgagc agtttcagaa gcaagaagtg
360

gaaactgaca atgggcttcc caacacgata tcc
393

<210> 2730

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2730

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			20					25					30			
Leu	Asp	Gln	Cys	Ala	Glu	Asp	Phe	Arg	Glu	Pro	Pro	His	Phe	Pro	Cys	
		35					40					45				
Leu	Gln	Lys	Leu	Leu	Asp	Tyr	Leu	Thr	Arg	Met	Met	Pro	Gly	Ser	Asp	
	50					55					60					
Pro	Glu	Arg	Arg	Ala	Gln	Asn	Leu	Leu	Glu	Gln	Phe	Gln	Lys	Gln	Glu	
65					70					75					80	
Val	Glu	Thr	Asp	Asn	Gly	Leu	Pro	Asn	Thr	Ile	Ser					
				85					90							

<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens

<400> 2731

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120
atcgggtgtca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
240
ggctacttcg gcatgtaccg gggagctgct gtgaacttga ccctcgtcac ccccgagaag
300
gccatcaagc tggcagccaa cgacttcttc cgacatcagc tctctaagga cgggcagaag
360
ctgaccctgc ttaaagagat gctggcgggc tgtggggctg gcacctgcca ggtgatcgtg
420
accacgcca tggagatgct gaagatc
447

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<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

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Ile	Gly	Val	Thr	Cys	Val	Phe	Pro	Ile	Asp	Leu	Ala	Lys	Thr	Arg	Leu	
			20					25					30			
Gln	Asn	Gln	Gln	Asn	Gly	Gln	Arg	Val	Tyr	Thr	Ser	Met	Ser	Asp	Cys	
		35				40						45				
Leu	Ile	Lys	Thr	Val	Arg	Ser	Glu	Gly	Tyr	Phe	Gly	Met	Tyr	Arg	Gly	
	50					55					60					
Ala	Ala	Val	Asn	Leu	Thr	Leu	Val	Thr	Pro	Glu	Lys	Ala	Ile	Lys	Leu	
65				70						75					80	
Ala	Ala	Asn	Asp	Phe	Phe	Arg	His	Gln	Leu	Ser	Lys	Asp	Gly	Gln	Lys	
			85					90					95			
Leu	Thr	Leu	Leu	Lys	Glu	Met	Leu	Ala	Gly	Cys	Gly	Ala	Gly	Thr	Cys	

	100		105		110
Gln	Val	Ile	Val	Thr	Thr
			Pro	Met	Glu
				Met	Leu
					Lys
					Ile
	115		120		125

<210> 2733

<211> 3619

<212> DNA

<213> Homo sapiens

<400> 2733

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<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

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			20					25					30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
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Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
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Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
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<210> 2738
<211> 299
<212> PRT
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<213> Homo sapiens

<400> 2738

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Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
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Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
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Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
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Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
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Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
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Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
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Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
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Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
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Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
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Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
      210          215          220
Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
      225          230          235          240
Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
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Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

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Ile Ile Ser	Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu					
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Ser Pro Ala	Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val					
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Leu Ser Val	Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys					
65		70		75		80
Gly Ala Asp	Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr					
	85		90		95	
Val Asn Asn	Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu					
	100		105		110	
His Gln Leu	Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys					
	115		120		125	
Arg Glu Asn	Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr					
	130		135		140	
Trp Lys Asp	Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln					
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His Gln Arg	Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile					
	165		170		175	
Val Leu Leu	His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly					
	180		185		190	
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<210> 2741

<211> 1487

<212> DNA

<213> Homo sapiens

<400> 2741

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<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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		20						25					30		
Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
		35					40					45			
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	50					55					60				
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
65				70						75				80	
Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
			85					90						95	
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
		100					105						110		
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile
		115				120						125			
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile

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Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp		
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Pro Trp Tyr		160

<210> 2743
 <211> 384
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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<210> 2744
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 2744
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 Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val
 35 40 45
 Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro
 50 55 60
 Arg Ala Tyr Gln Asp
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<210> 2745
 <211> 769
 <212> DNA
 <213> Homo sapiens

<400> 2745
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 240
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 480
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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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			20					25					30		
Ser	Gly	Glu	Lys	Leu	Pro	Asp	Gln	Pro	Phe	Thr	His	His	Ser	Gln	Glu
		35					40					45			
Gly	Pro	Phe	Pro	Pro	Gly	Arg	Glu	Thr	Ser	Arg	Pro	Ala	Pro	His	Thr
	50					55					60				
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65					70					75				80	
Pro	Ser	His	His	Ser	Gln	Glu	Gly	Pro	Phe	Pro	Pro	Gly	Glu	Lys	Leu
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Pro	Asp														

<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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 120

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 420
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 660
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 720
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<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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Glu	Pro	Arg	Pro	Ala	Pro	Arg	Thr	Ala	Pro	Arg	Lys	Pro	Glu	Ser	Pro
			20					25					30		
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35					40					45			
Gly	Cys	Phe	Ala	Cys	Val	Ser	Lys	Pro	Pro	Ala	Leu	Gln	Ala	Pro	Ala
	50					55				60					
Ala	Pro	Ala	Pro	Glu	Pro	Ser	Ala	Ser	Pro	Pro	Met	Ala	Pro	Thr	Leu
65				70				75					80		
Phe	Pro	Met	Glu	Ser	Lys	Ser	Ser	Lys	Thr	Asp	Ser	Val	Arg	Ala	Ala
				85				90					95		
Gly	Ala	Pro	Pro	Ala	Cys	Lys	His	Leu	Ala	Glu	Lys	Lys	Thr	Met	Thr

				100				105					110			
Asn	Pro	Thr	Thr	Val	Ile	Glu	Val	Tyr	Pro	Asp	Thr	Thr	Glu	Val	Asn	
			115					120					125			
Asp	Tyr	Tyr	Leu	Trp	Ser	Ile	Phe	Asn	Phe	Val	Tyr	Leu	Asn	Phe	Cys	
		130				135					140					
Cys	Leu	Gly	Phe	Ile	Ala	Leu	Ala	Tyr	Ser	Leu	Lys	Val	Arg	Asp	Lys	
145					150					155					160	
Lys	Leu	Leu	Asn	Asp	Leu	Asn	Gly	Ala	Val	Glu	Asp	Ala	Lys	Thr	Ala	
				165					170					175		
Arg	Leu	Phe	Asn	Ile	Thr	Ser	Ser	Ala	Leu	Ala	Ala	Ser	Cys	Ile	Ile	
			180					185					190			
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<210> 2749

<211> 2050

<212> DNA

<213> Homo sapiens

<400> 2749

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180					
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240					
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360					
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420					
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780					
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<210> 2750

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2750

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Thr	Ala	Gly	Tyr	Asp	His	Thr	Val	Arg	Phe	Trp	Gln	Ala	His	Ser	Gly
		20						25				30			
Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
		35				40					45				
Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Val	Gln	Pro	Val
	50					55					60				
Ser	Leu	Gly	Tyr	Gln	His	Ile	Arg	Met	Tyr	Asp	Leu	Asn	Ser	Asn	Asn
65				70					75					80	
Pro	Asn	Pro	Ile	Ile	Ser	Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser

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<210> 2751
<211> 1877
<212> DNA
<213> Homo sapiens
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<210> 2752

<211> 87

<212> PRT

<213> Homo sapiens

<400> 2752

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Thr	Pro	Ala	His	Ala	Pro	Thr	Xaa	Pro	Glu	Thr	Ala	Arg	Ser	Ala	Arg
			20					25					30		
Thr	Ala	Pro	Arg	Ser	Ala	Ile	Thr	Arg	Arg	Ala	Phe	Thr	Ser	Thr	Arg
		35					40					45			
Pro	Pro	Pro	Thr	Thr	Arg	Thr	Val	Ala	Ser	Ser	Gly	Thr	His	Thr	Ser
	50					55					60				
Gly	Leu	Ser	Pro	Thr	Ala	Ser	Arg	Pro	Ala	Arg	Cys	Arg	Ala	Pro	Gly
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<210> 2753

<211> 2561

<212> DNA

<213> Homo sapiens

<400> 2753

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<211> 731

<212> PRT

<213> Homo sapiens

<400> 2754

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      35          40          45
Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
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Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu
65          70          75          80
Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala
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Met Gly Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser
      100          105          110
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Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
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Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr
145          150          155          160
Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
      165          170          175
Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
      180          185          190
Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
      195          200          205
Ile Ile Glu Lys Asn Leu Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp
      210          215          220
Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala
225          230          235          240
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile
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Asn Ile Gly Tyr Ser Cys Arg Leu Val Ser Gln Asn Met Ala Leu Ile
      260          265          270
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      275          280          285
His Cys Thr Asp Leu Gly Asn Leu Leu Gly Lys Glu Asn Asp Val Ala
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Glu Gly Phe Asn Thr Lys Val Phe Trp Gly His Cys Ile Asn Ala Leu
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Val His Ser Leu Ile Leu Phe Trp Phe Pro Met Lys Ala Leu Glu His
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Pro Thr Ile Pro Ile Ala Pro Asp Met Arg Gly Gln Ala Thr Met Val
          595          600          605
Leu Ser Ser Ala His Phe Trp Leu Gly Leu Phe Leu Val Pro Thr Ala
          610          615          620
Cys Leu Ile Glu Asp Val Ala Trp Arg Ala Ala Lys His Thr Cys Lys
625          630          635          640
Lys Thr Leu Leu Glu Val Gln Glu Leu Glu Thr Lys Ser Arg Val
          645          650          655
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Arg Asp Arg Leu Ile Lys Arg Leu Gly Arg Lys Thr Pro Pro Thr Leu
          675          680          685
Phe Arg Gly Ser Ser Leu Gln Gln Gly Val Pro His Gly Tyr Ala Phe
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<210> 2755

<211> 4795

<212> DNA

<213> Homo sapiens

<400> 2755

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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2756

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Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
 50           55           60
Ser Ser Thr Asp Leu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
 65           70           75           80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
 85           90           95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
 100          105          110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
 115          120          125
Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
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Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
 145          150          155          160
Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
 165          170          175
Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
 180          185          190
Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
 195          200          205
Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
 210          215          220
Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
 225          230          235          240
Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
 245          250          255
Asp Ser Ser Glu Ser Glu Glu Glu Thr Leu His Lys Ser Thr Ser Ser
 260          265          270
Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
 275          280          285
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
 290          295          300
Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
 305          310          315          320
Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
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Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
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Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
 355          360          365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
 370          375          380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
 385          390          395          400
Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
 405          410          415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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Phe Ser Leu Gly Pro Ser Ala Leu Gln Arg Gly Glu Ser Ser Met Arg
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Ser Glu Lys Pro Ser Thr Ala His His Arg Pro Leu Arg Ser Ile Ala
                450                455                460
Arg Phe Ser Ser Lys Ser Lys Ser Met Asp Lys Ser Asp Glu Glu Leu
465                470                475                480
Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
                485                490                495
Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
                500                505                510
Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
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Ser Phe Tyr Met Ser Ser Pro Gly Pro Ser Glu Tyr Cys Pro Ser Glu
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<211> 449

<212> DNA

<213> Homo sapiens

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<210> 2758

<211> 82

<212> PRT

<213> Homo sapiens

<400> 2758

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20                25                30
Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala
35                40                45
Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

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<210> 2760
 <211> 84
 <212> PRT
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<400> 2760
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<210> 2761
 <211> 922
 <212> DNA
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<400> 2761
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<210> 2762
 <211> 307
 <212> PRT
 <213> Homo sapiens

<400> 2762
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 20 25 30
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 35 40 45
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu

50	55	60
Asn Ser Ser Thr Glu	Ala Asn Val Ile Lys	Glu Ala Leu Asp Ser Ser
65	70	75 80
Leu Glu Ser Thr Leu	Asp Asn Ser Cys Gln	Gly Ala Gln Met Asp Asn
	85	90 95
Lys Ser Glu Val Gln	Leu Trp Leu Leu Lys	Arg Ile Gln Val Pro Ile
	100	105 110
Glu Asp Ile Leu Pro	Ser Lys Glu Glu Lys	Ser Lys Thr Pro Pro Met
	115	120 125
Phe Leu Cys Ile Lys	Val Gly Lys Pro Met	Arg Lys Ser Phe Ala Thr
	130	135 140
His Thr Ala Ala Met	Val Gln Gln Tyr Gly	Lys Arg Arg Lys Gln Pro
145	150	155 160
Glu Tyr Trp Phe Ala	Val Pro Arg Glu Arg	Val Asp His Leu Tyr Thr
	165	170 175
Phe Phe Val Gln Trp	Ser Pro Asp Val Tyr	Gly Lys Asp Ala Lys Glu
	180	185 190
Gln Gly Phe Val Val	Val Glu Lys Glu Glu	Leu Asn Met Ile Asp Asn
	195	200 205
Phe Phe Ser Glu Pro	Thr Thr Lys Ser Trp	Glu Ile Ile Thr Val Glu
	210	215 220
Glu Ala Lys Arg Arg	Lys Ser Thr Cys Ser	Tyr Tyr Glu Asp Glu Asp
225	230	235 240
Glu Glu Val Leu Pro	Val Leu Arg Pro Pro	Arg Ala Phe Trp Glu Asn
	245	250 255
Lys Pro Leu Asn Arg	Trp Ala Arg Pro Phe	Pro Ala Arg Val Gln Gly
	260	265 270
Tyr Pro Trp Arg Leu	Ala Tyr Ser Thr Leu	Glu His Gly Thr Ser Leu
	275	280 285
Lys Thr Leu Tyr Arg	Lys Ser Ala Ser Leu	Asp Ser Pro Val Leu Leu
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Val Ile Lys		
305		

<210> 2763

<211> 2210

<212> DNA

<213> Homo sapiens

<400> 2763

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120

caaacagtcc agtcctgcag accacacagg gtacatctag agggttctac ttgcatcacc
180

cacacttcca ctctgtgaa acaactgtct tgggcatgag aagggccagg ataggccagg
240

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300

gtccctgcag gaagatgcta ataggtacaa caggtagaac atgtagacac aaacatctag
360

tttatttttt ctgactgtaa ccaaagtcag caaaagaaac aacaaaactt cagtgccta
420

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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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			20					25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
		35					40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
	50					55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
65					70					75				80	
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
			85					90						95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
		100					105						110		
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
		115					120					125			
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
	130					135					140				
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
	145				150					155					160
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
			165					170						175	
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
		180						185					190		
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
	195						200					205			
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
	210					215					220				
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
	225				230					235				240	
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245						250					255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
		260						265					270		
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
		275					280					285			
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
	290					295					300				
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
	305				310					315					320
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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                325                330                335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
                340                345                350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
                355                360                365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
                370                375                380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
385                390                395                400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
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Phe Phe Leu Arg Leu Arg Arg
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<210> 2765

<211> 582

<212> DNA

<213> Homo sapiens

<400> 2765

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180
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420
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480
ggcacagttg cagtcggcct gcaggtaag gtcacagcgg gcggccagcg ccccatccac
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582

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<210> 2766

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2766

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Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
                20                25                30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
                35                40                45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50		55		60
Leu Ser Gly Gln Trp	Trp Ser Ala Gly Ala Cys	Phe Leu Asp Leu Pro		
65	70	75	80	
Ser Leu Ala Leu Cys	Trp Pro Gly Asp Ser Gly	Asp Ala Glu Trp Pro		
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Glu Ala Gly Ser				
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<210> 2767

<211> 1202

<212> DNA

<213> Homo sapiens

<400> 2767

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120
gactcagcct acgacagcaa cgaccctgat gtggaatcca acagcagcag tggcatcagc
180
tctcccagca ggcagcccca ggtgcccattg gccacagctg ctggccttga tagcgcgggc
240
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660
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720
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960
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1020
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1080
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1200

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<210> 2768
<211> 282
<212> PRT
<213> Homo sapiens

<400> 2768
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Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser
35 40 45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
50 55 60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
65 70 75 80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
85 90 95
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro
100 105 110
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
115 120 125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
130 135 140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
145 150 155 160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
165 170 175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
180 185 190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
195 200 205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
210 215 220
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
225 230 235 240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
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Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu
260 265 270
Val Ala Ser Gln Gln Phe Gln Phe Leu Ala
275 280

<210> 2769
<211> 1286
<212> DNA
<213> Homo sapiens

<400> 2769
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 240
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<210> 2770

<211> 228

<212> PRT

<213> Homo sapiens

<400> 2770

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<210> 2771
<211> 1668
<212> DNA
<213> Homo sapiens
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2008

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<210> 2772

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2772

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Met	Thr	Ser	Gln	Thr	Pro	Leu	Pro	Gln	Ser	Pro	Arg	Pro	Arg	Arg	Pro
			20					25					30		
Thr	Met	Ser	Thr	Val	Val	Glu	Leu	Asn	Val	Gly	Gly	Glu	Phe	His	Thr
			35				40					45			
Thr	Thr	Leu	Gly	Thr	Leu	Arg	Lys	Phe	Pro	Gly	Ser	Lys	Leu	Ala	Glu
			50				55				60				
Met	Phe	Ser	Ser	Leu	Ala	Lys	Ala	Ser	Thr	Asp	Ala	Glu	Gly	Arg	Phe
65				70						75				80	
Phe	Ile	Asp	Arg	Pro	Ser	Thr	Tyr	Phe	Arg	Pro	Ile	Leu	Asp	Tyr	Leu
			85						90					95	
Arg	Thr	Gly	Gln	Val	Pro	Thr	Gln	His	Ile	Pro	Glu	Val	Tyr	Arg	Glu

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<210> 2773
<211> 593
<212> DNA
<213> Homo sapiens
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360
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420
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593
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<210> 2774
<211> 157
<212> PRT
<213> Homo sapiens
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<400> 2774

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 35 40 45
 Gly Ile Met Arg Ser Lys Lys Pro Lys Lys His Pro Lys Val Ala Val
 50 55 60
 Lys Ala Lys Pro Ser Pro Arg Leu Thr Ile Phe Asp Glu Glu Val Asp
 65 70 75 80
 Pro Asp Glu Gly Leu Phe Gly Pro Gly Arg Lys Leu Ser Pro Gln Asp
 85 90 95
 Pro Ser Glu Asp Val Ser Ser Met Asp Pro Leu Lys Leu Phe Asp Asp
 100 105 110
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Asp	Ser	Cys	Cys	Ile	Cys	Ala	Cys	Asn	Met	Asn	Ile	Lys	Gly	Ala	Asp
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Val	Gly	Leu	Tyr	Ile	Pro	Asp	Ser	Ser	Asn	Glu	Asp	Gln	Tyr	Arg	Cys
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Thr	Cys	Gly	Phe	Ser	Ala	Ile	Met	Asn	Arg	Lys	Leu	Gly	Tyr	Asn	Ser
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Ile	Gly	Gln	Ala	Ala	Glu	Arg	Arg	Leu	Met	Met	Cys	Gln	Ser	Thr	Phe
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Leu	Leu	Leu	Leu	Leu	Gln	Asn	Gln	His	Thr	Gln	Pro	Phe	Ala	Ser	Leu
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Asn	Phe	Leu	Asp	Tyr	Ile	Ser	Ser	Asn	Asn	Arg	Gln	Thr	Leu	Pro	Cys
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Ala	Phe	Asn	Pro	Thr	Ser	Asn	Ser	Ser	Ser	Thr	Asn	Pro	Ala	Ala
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Lys Asp Val Cys Arg Met Cys Gly Ile Ser Ala Ala Asp Ser Pro Ser
865              870              875              880
Ile Leu Ser Ala Cys Leu Val Ala Met Glu Pro Gln Gly Ser Phe Val
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Val Met Pro Asp Ala Val Thr Met Gly Ser Val Phe Gly Arg Ser Thr
      900              905              910
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Cys Thr His Ile Leu Val Phe Pro Thr Ser Ser Thr Ile Gln Val Ala
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Pro Ala Asn Tyr Pro Asn Glu Asp Gly Phe Ser Pro Asn Asn Asp Asp
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Gln Asn Gln Cys Pro Leu Phe Leu Lys Ala Ser Leu His His His Ile
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<212> DNA

<213> Homo sapiens

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Asp	Arg	Gly	Asp	Ala	Ala	Ala	Thr	Asp	Asp	Pro	Ala	Ala	Arg	Phe	Gln	
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Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr				
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<210> 2781

<211> 1268

<212> DNA

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Phe	Ser	Ser	Arg	Phe	Lys	Asn	Leu	Ala	His	Gln	His	Gln	Ser	Met	Phe
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Tyr	Glu	Ala	Leu	His	Gly	Pro	Pro	Lys	Lys	Ile	Leu	Val	Glu	Gly	Ala
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 1020
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 1080
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 1140
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 1200
 gggacatggc cacctgacct gtgtgtggct ggtgcagcct ggcaccaagt gggctacctg
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 1320

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 1380
 caccagcaga gctaagactg gagtctcctg tggcctaact ttcaatgagg gaaccggatg
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 1560
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 1620
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 1740
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 1800
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 1860
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 1920
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 1980
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 2040
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 2100
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 2220
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 2280
 gaatacttaa gtcttttagt acgtgttttt ttcccttggt caaataatct gaaaatattt
 2340
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 2376

<210> 2784

<211> 361

<212> PRT

<213> Homo sapiens

<400> 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
			20					25					30		
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
			35					40					45		
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
			50					55				60			
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
65						70				75				80	
Ile	Ala	Phe	Thr	Met	Asp	Lys	Leu	Ile	Gln	Ser	Ile	Val	Arg	Gln	Leu

85																90								95							
Gln	His	Ile	Val	Ser	Asp	Glu	Ile	Cys	Val	Gln	Val	Thr	Asp	Leu	Tyr																
100																105								110							
Leu	Ala	Glu	Asn	Asn	Asn	Gly	Ala	Thr	Gly	Gly	Gln	Leu	Asn	Thr	Gln																
115																120								125							
Asn	Ser	Arg	Ser	Leu	Leu	Glu	Ser	Thr	Tyr	Gln	Arg	Lys	Ala	Glu	Gln																
130																135								140							
Leu	Met	Ser	Asp	Glu	Asn	Cys	Phe	Lys	Leu	Met	Phe	Ile	Gln	Ser	Gln																
145																150								155							
Gly	Gln	Val	Gln	Leu	Thr	Ile	Glu	Leu	Leu	Asp	Thr	Glu	Glu	Glu	Asn																
165																170								175							
Ser	Asp	Asp	Pro	Val	Glu	Ala	Glu	Arg	Trp	Ser	Asp	Tyr	Val	Glu	Arg																
180																185								190							
Tyr	Met	Asn	Ser	Asp	Thr	Thr	Ser	Pro	Glu	Leu	Arg	Glu	His	Leu	Ala																
195																200								205							
Gln	Lys	Pro	Val	Phe	Leu	Pro	Arg	Asn	Leu	Arg	Arg	Ile	Arg	Lys	Cys																
210																215								220							
Gln	Arg	Gly	Arg	Glu	Gln	Gln	Glu	Lys	Glu	Gly	Lys	Glu	Gly	Asn	Ser																
225																230								235							
Lys	Lys	Thr	Met	Glu	Asn	Val	Asp	Ser	Leu	Asp	Lys	Leu	Glu	Cys	Arg																
245																250								255							
Phe	Lys	Leu	Asn	Ser	Tyr	Lys	Met	Val	Tyr	Val	Ile	Lys	Ser	Glu	Asp																
260																265								270							
Tyr	Met	Tyr	Arg	Arg	Thr	Ala	Leu	Leu	Arg	Ala	His	Gln	Ser	His	Glu																
275																280								285							
Arg	Val	Ser	Lys	Arg	Leu	His	Gln	Arg	Phe	Gln	Ala	Trp	Val	Asp	Lys																
290																295								300							
Trp	Thr	Lys	Glu	His	Val	Pro	Arg	Glu	Met	Ala	Ala	Glu	Thr	Ser	Lys																
305																310								315							
Trp	Leu	Met	Gly	Glu	Gly	Leu	Glu	Gly	Leu	Val	Pro	Cys	Thr	Thr	Thr																
325																330								335							
Cys	Asp	Thr	Glu	Thr	Leu	His	Phe	Val	Ser	Ile	Asn	Lys	Tyr	Arg	Val																
340																345								350							
Lys	Tyr	Gly	Thr	Val	Phe	Lys	Ala	Pro																							
355																360															

<210> 2785

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2785

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tgatgacatg caccctgcag cagccgggat ggcagacggg gtccacctcc tagggttctc
120
tgatgagatc ctcttcaca tcttgagtca cgtccccagc acagatctga ttctgaacgt
180
ccggcgtacc tgtcgggaagc ttgcagccct gtgccttgac aagagcctca tccacaccgt
240
gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat
300
cggccgggag atccagcagc tgagcatggc tggctgctac tggctgctg gctccaccgt
360

ggaacacgtg gcccgctgcc cgcagcctgg tgaagggtgaa cctctcgggc tgccacctca
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 cttccctgcg cctctacaag atgctctcgg cctgcagca cctgcgctcg ctggccatcg
 480
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 492

<210> 2786
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 2786
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 Pro Ala Ala Ala Gly Met Ala Asp Gly Val His Leu Leu Gly Phe Ser
 20 25 30
 Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu
 35 40 45
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu
 50 55 60
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala
 65 70 75 80
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile
 85 90 95
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val
 100 105 110
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly
 115 120 125
 Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala
 130 135 140
 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro
 145 150 155

<210> 2787
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 2787
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 atgtggggag aagagccgta ctctgacata tcagttgcta aaacacgtgc agggcatgcc
 120
 acaatgcaca gacatggcag tatecttctg gtgggaggga gtcaccattt gctctgcctt
 180
 gccctctgct ggggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg
 240
 ggtattgatt ctgaagagat cactgatggc cgtgatttct tgectcagct taccagat
 299

<210> 2788
 <211> 95
 <212> PRT

<213> Homo sapiens

<400> 2788

Met	Thr	Arg	Asp	Ser	Gly	Met	Lys	Gln	Lys	His	Ala	Ala	Ser	Thr	Ser
1				5				10						15	
Met	Trp	Gly	Glu	Pro	Tyr	Ser	Asp	Ile	Ser	Val	Ala	Lys	Thr	Arg	
		20				25					30				
Ala	Gly	His	Ala	Thr	Met	His	Arg	His	Gly	Ser	Ile	Leu	Leu	Val	Gly
		35				40					45				
Gly	Ser	His	His	Leu	Leu	Cys	Pro	Ala	Leu	Cys	Trp	Val	Leu	Leu	Gln
	50				55					60					
Val	Leu	Leu	His	Pro	Ala	Leu	Glu	Thr	Ile	Leu	Trp	Gly	Ile	Asp	Ser
65				70					75					80	
Glu	Glu	Ile	Thr	Asp	Gly	Arg	Asp	Phe	Leu	Pro	Gln	Leu	Thr	Gln	
				85				90						95	

<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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gctgctggaa ggagtgcacc aggaggctgc cggggtccgg gagcccatgc tccagtgcct
120
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcagggtcca
180
ccctggactg cagcctctgc acttcttctt tcattgcact gtccactcct gcgggcagag
240
ccaggecgtg ggtcacggcc ggccggctcc ccacccacac cccaggggt ccctcctgtc
300
cccagggaga ggcagagcca gaagactcag gcccaggcct ctgccacccc cgctgcctgc
360
ctggcgctgg ccagaggtct caggctatgc cgcctaagta cgtcggggcg ggtggctctg
420
cgcagagggt caggggtccc gccacgtga gggagggtcaa ggctgagggtc tcagcggccc
480
tcgttccgaa tt
492

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

Arg	Lys	Ser	Ala	Arg	Ser	Gly	Ser	Arg	Cys	Gly	Arg	Ala	Ala	Gly	Arg
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Ser	Ala	Pro	Gly	Gly	Cys	Arg	Gly	Pro	Gly	Ala	His	Ala	Pro	Val	Pro
		20					25					30			
Ala	Arg	Pro	Gly	Cys	Ala	Val	Gly	Pro	Ala	Pro	Ala	Ala	Ala	Ser	Pro
		35				40					45				
Pro	Ala	Gly	Pro	Pro	Trp	Thr	Ala	Ala	Ser	Ala	Leu	Leu	Pro	Ser	Leu

50		55		60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala				
65		70		75
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Val Pro Arg Glu Arg				80
	85		90	95
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys				
	100		105	110
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly				
	115		120	125
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg				
	130		135	140

<210> 2791

<211> 1271

<212> DNA

<213> Homo sapiens

<400> 2791

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120
ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt
180
gtaagattat atccaaatat ttactcctgg ttgtcctct tgggcaagct gtgaatatga
240
tcaaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aatacccaga
300
gaagtgtgcc taaattagca ttagggtttg agggatccta aggatgacaa aaagggactc
360
ttctattgaa ttcgtggttg atgtcagcg atagtaacia tctgcctcc cctaactct
420
tctccccctt ccagcagctt cacagaacat ggttgatgag gtaacttagg ggatgcacag
480
ggtgtggcca gaagaccctt ttccctatag accactatga gcctgaaag atttatgagg
540
taatgttcac ttcactctgt gcttcttttc ctagatgtga actatgaaga ctttactttc
600
accataccag atgtagagga ctcaagtcag agaccagatc agggacccca gagacctcct
660
cctgaaggac tctacctag accccctggt gatagtggta accaagatga tggctctcag
720
cagagaccac caaaaccagg aggccatcac cgccatcctc cccacctcc ttttcaaaat
780
cagcaacgac caccccaacg aggacaccgt caactctctc taccctgatt tcttctgtc
840
agcctgcagg aagcatcatc attcttccgg agggacagac cagcaagaca tccccaggag
900
caaccactct ggtaatctag aattcagtgg cagaaaataa ataagaagat aacttccttc
960
agaaagccat gacattgaaa taatgtggtc ataactcttt cttcagtata ccaataaaat
1020
attaatagca tgcggaagaa agaatggttt gcatccacat ggagagtgtg ccatttagag
1080

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gtaacagggg gaggagaggg tgtgccatca agaggcaaca tggaggtgtt tcaaacctat
 1140
 gcatcttggt ataaatatat ctttgctcac atgaatttta cttgttaatt agcctggctg
 1200
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 1260
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<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

Cys	Ser	Leu	His	Pro	Val	Leu	Leu	Phe	Leu	Asp	Val	Asn	Tyr	Glu	Asp
1				5					10					15	
Phe	Thr	Phe	Thr	Ile	Pro	Asp	Val	Glu	Asp	Ser	Ser	Gln	Arg	Pro	Asp
			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
			35				40					45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys
	50					55					60				
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln
65					70					75				80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
				85				90						95	
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
				100				105						110	
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
				115				120							

<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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 120
 tgaggcggcg gcgtcactgc caggaaacaa ccccaacagt cagcgcgccg gcggccgcgg
 180
 cggccctgag agctgactct gcagctgagg tagagagaca acgatcagga accctaagaa
 240
 gaggcgccag aggagccgcc ttctgcctca gaacggcgtg actcggagaa ttggagcggt
 300
 attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact
 360
 cagatcttaa gtagtgatat ttctcttttg tctgccccta ttgtaagtgc agatggaaca
 420
 caacaggtta ttctggtaca agttaacca ggagaagcat ttacaataag aagagaagat
 480

ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct
 540
 gtgcctccta tctatgtgcc tcttgatat gccccacagg ttattgaaga caatggtggt
 600
 cgaagagttg tctgtgtccc tcaggcacca gagtttcacc ctggtagtca cacagttctc
 660
 caccgttctc cacatcctcc tctacctggt ttcattcctg tcccaactat gatgccgcct
 720
 caccagtcata tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc
 780
 cncagtatca gtcttcacaa gtctatggag atgtagatgc tcaactctaca catggccctt
 840
 cagcgt
 847

<210> 2794

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2794

Met	Ala	Glu	His	Pro	Pro	Leu	Leu	Asp	Thr	Thr	Gln	Ile	Leu	Ser	Ser
1				5					10					15	
Asp	Ile	Ser	Leu	Leu	Ser	Ala	Pro	Ile	Val	Ser	Ala	Asp	Gly	Thr	Gln
			20					25					30		
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
			35				40					45			
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
	50					55					60				
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65					70					75					80
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
			85						90					95	
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
			100						105					110	
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
			115						120					125	
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
			130						135						

<210> 2795

<211> 1022

<212> DNA

<213> Homo sapiens

<400> 2795

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 ccaatgacca ccagcaccac gaagagcgtg ccgtagtcgc tgcgcacctg gctggcccgc
 120
 gcctggcagc tgctggttgt ggaatagttc tggatgccaa tctcctccag gctcctgcgg
 180
 atgtcaccca gcatggaaag gacatcttga gtgggcacca cccctgctc gccaccagt
 240

gtcattgagaa ggtgctgctc cttctcgctg ggcttgctca gagagatgtg ccaggcccca
 300
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 360
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 420
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 480
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 540
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 600
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 660
 aatgaaggca aggccggcac ctctctgtgc tggccagaca aaccagctgc tcctgcagtg
 720
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 780
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 840
 gtgactgaag gcagcagcaa gctgggcccc atgctgctct ccacctcatc aggtgagnna
 900
 gaaaagtcac ggacctgagg cttggcttct tcttgggagc cattcacagg gagcagctcc
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 1020
 gt
 1022

<210> 2796
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 2796
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 Pro Lys Val Ala Glu Glu Gly Val Ser Ser Met Ser Pro Gly Ala Ser
 20 25 30
 Gly Glu Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys
 35 40 45
 Ser Ala Pro Leu Gly Ala Val Val
 50 55

<210> 2797
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2797
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 gccctctca tcagcacctg catcctgccc aatgtggagg ccgtgagcaa catccacaac
 120

ctgaactcca tcagcgagtc cccgcatgag cgcattgcacc cctacatcga gctggcctgg
 180
 ggcttctcca ccgtgcttgg catcctactc ttcttgcccg aggtggtgct gctctgctgg
 240
 atcaagtcc tccccgtgga tgcccgccgc cagcctggcc cccacctgg ccctgggagt
 300
 cacacgggct ggcaggccgc cctggtgtcc accatcatca tggtgcccgt gggcctcatc
 360
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 420
 aaccgcgaga tcgaggagct ccacaagctc aaggtccagc tggacgggca tgagc
 475

<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

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Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
		20						25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35					40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70					75					80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90					95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
		100					105					110			
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
	115					120					125				
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130					135					140				
Glu	Glu	Leu	His	Lys	Leu	Lys	Val	Gln	Leu	Asp	Gly	His	Glu		
145				150						155					

<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

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			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35				40					45				
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50				55					60					
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70					75					80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85					90					95		
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

	100		105		110
Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro Cys Lys Leu Val					
115		120		125	
Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp Ser Ser Gly Pro					
130		135		140	
Ala Asn Ser Thr Ala Asp Leu Leu Lys Gln Gly Ala Ala Cys Asn Val					
145		150		155	
Leu Phe Ile Asn Ser Val Asp Met Glu Ser Leu Thr Gly Pro Gln Ala					
165		170		175	
Ile Ser Lys Ala Thr Ser Glu Thr Leu Ala Ala Asp Pro Thr Pro Ala					
180		185		190	
Ala Thr Ile Val His Phe Lys Val Ser Ala Gln Gly Ile Thr Leu Thr					
195		200		205	
Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His Tyr Pro Leu Asn Thr					
210		215		220	
Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys Trp Met Lys Thr					
225		230		235	
Glu Gly Gly Ala Pro Ala Lys Leu Phe Gly Phe Val Ala Arg Lys Gln					
245		250		255	
Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala Glu Leu Asp Pro					
260		265		270	
Asn Gln Pro Ala Ser Ala Ile Val Asn Phe Val Ser Lys Val Met Leu					
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290					

<210> 2801

<211> 549

<212> DNA

<213> Homo sapiens

<400> 2801

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240

gatgccattc gagccctgaa gaagcggctc aacgggaacc ggaactacag agaggtgatg
300

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420

cctcccacca ttgtacagga caaagtgtt gctctgatcc aggcattggc tgatgccttt
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gttgaattc

549

<210> 2802

<211> 151
 <212> PRT
 <213> Homo sapiens

<400> 2802

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Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu
 20           25           30
Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys
 35           40           45
Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr
 50           55           60
Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn
 65           70           75           80
Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp
 85           90           95
Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile
 100          105          110
Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe
 115          120          125
Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu
 130          135          140
Lys Arg Lys Gly Val Glu Phe
145          150

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<210> 2803
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 2803

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180
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240
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360
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459

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<210> 2804
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2804

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 Val Arg Gly Met Thr Asp Ser Pro Pro Ala Val Gly Cys Val Leu
 35 40 45
 Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
 50 55 60
 Thr Ser Pro Ser Ser Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
 65 70 75 80
 Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
 85 90 95
 Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
 100 105 110
 Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
 115 120 125
 Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
 130 135 140
 Ala Gln Pro Gly Leu Ala Gly Thr Gly
 145 150

<210> 2805

<211> 771

<212> DNA

<213> Homo sapiens

<400> 2805

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 180
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 240
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<210> 2806
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2806
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 35 40 45
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
 50 55 60
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
 65 70 75 80
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
 85 90 95
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
 100 105 110
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
 115 120 125
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
 130 135 140
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
 145 150 155 160
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
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 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
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<210> 2807
 <211> 1660
 <212> DNA
 <213> Homo sapiens

<400> 2807
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 420
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 480

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<210> 2808

<211> 390

<212> PRT

<213> Homo sapiens

<400> 2808

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20           25           30
Leu Glu Leu Glu Ser Ser Gln Asp Ile Gln Asp Val Leu Asp Ala Asn
35           40           45
Lys Ser Leu Pro Glu Ser Ser Leu Thr Asp Leu Leu Ser Asp Asn Phe

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50		55		60
Thr Asp Ser Leu Val	Ser Phe Ser Ala Glu Ile	Leu Ser Arg Thr Leu		
65	70	75	80	
Cys Glu Pro Leu Val	Ala Ser Leu Trp Met Lys	Leu Gly Asn Thr Gly		
	85	90	95	
Ala Met Arg Arg Cys	Val Lys Leu Thr Val	Ala Leu Glu Thr Ala Glu		
	100	105	110	
Cys Glu Phe Pro Pro	His Leu Asp Val Tyr Ile	Glu Asp Pro His Leu		
	115	120	125	
Pro Pro Ser Leu Gly	Leu Leu Pro Gly Ala	Arg Val His Phe Ser Gln		
	130	135	140	
Leu Glu Lys Arg Val	Ser Arg Ser His Asn	Val Tyr Cys Cys Phe Arg		
	145	150	155	160
Ser Ser Thr Tyr Val	Gln Val Leu Ser Phe	Pro Pro Glu Thr Thr Ile		
	165	170	175	
Ser Val Pro Leu Pro	His Ile Tyr Leu Ala	Glu Leu Leu Gln Gly Gly		
	180	185	190	
Gln Ser Pro Phe Gln	Ala Thr Ala Ser Cys	His Ile Val Ser Val Phe		
	195	200	205	
Ser Leu Gln Leu Phe	Trp Val Cys Ala Tyr	Cys Thr Ser Ile Cys Arg		
	210	215	220	
Gln Gly Lys Cys Thr	Arg Leu Gly Ser Thr	Cys Pro Thr Gln Thr Ala		
	225	230	235	240
Ile Ser Gln Ala Ile	Ile Arg Leu Leu Val	Glu Asp Gly Thr Ala Glu		
	245	250	255	
Ala Val Val Thr Cys	Arg Asn His His Val	Ala Ala Ala Leu Gly Leu		
	260	265	270	
Cys Pro Arg Glu Trp	Ala Ser Leu Leu Asp	Phe Val Gln Val Pro Gly		
	275	280	285	
Arg Val Val Leu Gln	Phe Ala Gly Pro Gly	Ala Gln Leu Glu Ser Ser		
	290	295	300	
Ala Arg Val Asp Glu	Pro Met Thr Met Phe	Leu Trp Thr Leu Cys Thr		
	305	310	315	320
Ser Pro Ser Val Leu	Arg Pro Ile Val Leu	Ser Phe Glu Leu Glu Arg		
	325	330	335	
Lys Pro Ser Lys Ile	Val Pro Leu Glu Pro	Pro Arg Leu Gln Arg Phe		
	340	345	350	
Gln Cys Gly Glu Leu	Pro Phe Leu Thr His	Val Asn Pro Arg Leu Arg		
	355	360	365	
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<210> 2809

<211> 1502

<212> DNA

<213> Homo sapiens

<400> 2809

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1502

<210> 2810

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2810

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 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys
 35 40 45
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys
 50 55 60
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys
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 Phe Gly Thr Arg Trp Phe
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<210> 2811

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2811

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<210> 2812

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2812

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Gly	Pro	Arg	Val	Pro	Gly	Pro	Pro	Arg	Pro	Trp	Gly	Ala	Ala	Pro	Leu
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Pro	Pro	Gly	Pro	Thr	Gly	Arg	Ser	Pro	Arg	Ala	Ala	Val	Gly	His	His
			100					105					110		
Arg	Ala	Ala	Gly	Pro	Pro	Gly	Cys	Val	Gly	Pro	Ser	Leu	Ser	Gly	Gln
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<210> 2813

<211> 2417

<212> DNA

<213> Homo sapiens

<400> 2813

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<211> 471

<212> PRT

<213> Homo sapiens

<400> 2814

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Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
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Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
65          70          75          80
Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
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Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
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Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
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Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
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Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
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Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
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Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
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Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
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Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
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Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
          275          280          285
Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
          290          295          300
Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
305          310          315          320
His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
          325          330          335
Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
          340          345          350
Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
          355          360          365
Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
          370          375          380
Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
385          390          395          400
Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
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Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

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<210> 2815

<211> 1421

<212> DNA

<213> Homo sapiens

<400> 2815

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 1320
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<210> 2816
 <211> 307
 <212> PRT
 <213> Homo sapiens

<400> 2816
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 35 40 45
 Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr
 50 55 60
 Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala
 65 70 75 80
 Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser
 85 90 95
 Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg
 100 105 110
 Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly
 115 120 125
 Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg
 130 135 140
 Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp
 145 150 155 160
 Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys
 165 170 175
 Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Val
 180 185 190
 Asp Ser Ala Met Lys Glu Glu Val Gln Arg Leu Gln Ser Arg Val Asp
 195 200 205
 Leu Leu Glu Glu Lys Leu Gln Leu Val Leu Ala Pro Leu His Ser Leu
 210 215 220
 Ala Ser Gln Ala Gly Ala Trp Ala Pro Gly Pro Arg Gln Pro Pro Gly
 225 230 235 240
 Ala Leu Leu Pro Ala Ala Arg Pro His Arg Leu Pro Glu Arg Ala Asp
 245 250 255
 Phe Leu Pro Gly Gly Ala Ala Gly Val Leu Leu Leu Gln Glu Arg Leu
 260 265 270
 Xaa Asp Cys Pro Ala Pro Gln Ala Gly Leu Ser Pro Ser Arg Arg Pro
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 Ala Ala Pro Met Pro Leu Pro Asn Met Leu Gly Val Gln Lys Pro Pro
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<210> 2817

<211> 219

<212> DNA

<213> Homo sapiens

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<210> 2818

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2818

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Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
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Gln His Thr Phe Ala Pro Phe Thr Arg
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<212> DNA

<213> Homo sapiens

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420

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 <211> 195
 <212> PRT
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<400> 2820
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 20 25 30
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 35 40 45
 Met Gly Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser
 50 55 60
 Val Gly Arg Glu Ala His Ala Gln Gln Pro Leu Leu Pro Asp Val Ile
 65 70 75 80
 Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met Phe Thr
 85 90 95
 Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe Ser Leu Asn
 100 105 110
 Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His Ile Met Lys Asn
 115 120 125
 Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val Gly Asp Arg Ser Ile
 130 135 140
 Met Gln Ser Gln Ser Leu Met Leu Glu Leu Arg Glu Gln Asp Gln Val
 145 150 155 160
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 Glu Leu Asp Thr Tyr Ile Thr Phe Ser Gly Tyr Leu Val Lys His Ala
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<210> 2821
 <211> 1746
 <212> DNA
 <213> Homo sapiens

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 50 55 60
 Pro Leu Asp Lys His Met Glu Met Glu Asp Ile Ser Ser Glu Glu Val
 65 70 75 80
 Val Glu Ile Glu Tyr Val Glu Lys Tyr Thr Ala Pro Gln Pro Glu Gln
 85 90 95
 Cys Met Phe His Asp Asp Trp Ile Ser Ser Ile Lys Gly Ala Glu Glu
 100 105 110
 Trp Ile Leu Thr Gly Ser Tyr Gly Lys Thr Ser Arg Ile Trp Ser Leu
 115 120 125
 Glu Gly Lys Ser Ile Met Thr Ile Val Gly His Thr Asp Val Val Lys
 130 135 140
 Asp Val Ala Trp Val Lys Lys Asp Ser Leu Ser Cys Leu Leu Xaa Glu
 145 150 155 160
 Cys Phe Tyr Gly Ser Asp Tyr Ser Leu Met Gly Val Glu Cys Arg Glu
 165 170 175
 Lys Gln Ser Glu Ser Pro Thr Leu Leu Xaa Arg Gly His Ala Gly Ser
 180 185 190
 Val Asp Ser Ile Ala Val Asp Gly Ser Gly Thr Lys Phe Cys Ser Gly
 195 200 205
 Ser Trp Asp Lys Met Leu Lys Ile Trp Ser Thr Val Pro Thr Asp Glu
 210 215 220
 Glu Asp Glu Met Glu Glu Ser Thr Asn Arg Pro Arg Lys Lys Gln Lys
 225 230 235 240
 Thr Glu Gln Leu Gly Leu Thr Arg Thr Pro Ile Val Thr Leu Ser Gly
 245 250 255
 His Met Glu Ala Val Ser Ser Val Leu Trp Ser Asp Ala Glu Glu Ile
 260 265 270
 Cys Ser Ala Ser Trp Asp His Thr Ile Arg Val Trp Asp Val Glu Ser
 275 280 285
 Gly Ser Leu Lys Ser Thr Leu Thr Gly Asn Lys Val Phe Asn Cys Ile
 290 295 300
 Ser Tyr Ser Pro Leu Cys Lys Arg Leu Ala Ser Gly Ser Thr Asp Arg
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 His Ile Arg Leu Trp Asp Pro Arg Thr Lys Asp Gly Ser Leu Val Ser
 325 330 335
 Leu Ser Leu Thr Ser His Thr Gly Trp Val Thr Ser Val Lys Trp Ser


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Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
          385          390          395          400
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<210> 2823

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2823

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<210> 2824

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<212> PRT

<213> Homo sapiens

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Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
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His

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<210> 2825
 <211> 1520
 <212> DNA
 <213> Homo sapiens

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<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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	50				55					60					
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Glu	His	Glu	Ser	Glu	Gly	Gly	Arg	Thr	Pro	Leu	Met	Lys	Ala	Ala	Arg
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Ala	Ala	Lys	Gly	Gly	His	Thr	Ser	Val	Val	Cys	Tyr	Leu	Leu	Asp	Tyr
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Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile
          405          410          415
Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu
          420          425          430
Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln
          435          440          445
Leu Gln Ser Leu Glu Leu Ala His Ala Asp Gln Leu Thr Lys Glu Lys
          450          455          460
Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln
465          470          475          480
Lys Ile Leu Glu Glu Leu Gln Lys Val Glu Arg Glu Leu Gln Leu Lys
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<210> 2827

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2827

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<210> 2828

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2828

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Leu	Tyr	Pro	Gly	Gly	Cys	Gln	Gln	Leu	Leu	His	Leu	Cys	Val	Gln	Gln
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Leu	Gly	Ala	Cys	Leu	Arg	Gly	Ala	Leu	Thr	Asn	Leu	Pro	Ala	Gly	Leu
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<210> 2829

<211> 3648

<212> DNA

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<400> 2829

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<211> 668

<212> PRT

<213> Homo sapiens

<400> 2830

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Val	Glu	Arg	Leu	Phe	Ser	Gln	Leu	Val	Glu	Ser	Gly	Asn	Pro	Ala	Leu

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Cys	Met	Thr	Asp	Ala	Lys	Lys	Leu	Tyr	Thr	Leu	Phe	Tyr	Val	His
			100					105					110	
Ser	Lys	Leu	Asn	Asp	Met	Ile	Asp	Ala	Ile	Pro	Lys	Ser	Lys	Asn
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Asn	Asp	Thr	Lys	Gly	Lys	Asn	Lys	Lys	Lys	Lys	Lys	Lys	Ser	Lys

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Pro	Gly	Asn	Arg	Glu	Thr	Ser	Gly	Asn	Thr	Met	His	Thr	Val	Phe	His	
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Arg	Asp	Lys	Thr	Lys	Asp	Thr	His	Pro	Glu	Ser	Cys	Cys	Ser	Ser	Glu	
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Gln	Phe	Ala	Glu	Pro	Thr	Glu	Thr	Leu	Phe	Gly	Pro	Asp	Ser	Gly	Lys	
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<213> Homo sapiens

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 <211> 611
 <212> PRT
 <213> Homo sapiens

<400> 2832

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			20					25					30		
Gly	Thr	Arg	Thr	Ser	Ser	Gly	Arg	Leu	Arg	Arg	Leu	Gly	Asp	Ser	Ser
			35				40					45			
Gly	Pro	Ala	Leu	Lys	Arg	Ser	Phe	Glu	Val	Glu	Glu	Val	Glu	Thr	Pro
	50					55					60				
Asn	Ser	Thr	Pro	Pro	Arg	Arg	Val	Gln	Thr	Pro	Leu	Leu	Arg	Ala	Thr
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Val	Ala	Ser	Ser	Thr	Gln	Lys	Phe	Gln	Asp	Leu	Gly	Val	Lys	Asn	Ser
				85					90					95	
Glu	Pro	Ser	Ala	Arg	His	Val	Asp	Ser	Leu	Ser	Gln	Arg	Ser	Pro	Lys
			100					105					110		
Ala	Ser	Leu	Arg	Arg	Val	Glu	Leu	Ser	Gly	Pro	Lys	Ala	Ala	Glu	Pro
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Val	Ser	Arg	Arg	Thr	Glu	Leu	Ser	Ile	Asp	Ile	Ser	Ser	Lys	Gln	Val
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Glu	Val	Leu	Gly	His	Lys	Thr	Pro	Glu	Pro	Ala	Pro	Arg	Arg	Thr	Glu
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Ile	Thr	Ile	Val	Lys	Pro	Gln	Glu	Ser	Ala	His	Arg	Arg	Met	Glu	Pro
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Pro	Ala	Ser	Lys	Val	Pro	Glu	Val	Pro	Thr	Ala	Pro	Ala	Thr	Asp	Ala
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Ala	Pro	Lys	Arg	Val	Glu	Ile	Gln	Met	Pro	Lys	Pro	Ala	Glu	Ala	Pro
	210					215					220				
Thr	Ala	Pro	Ser	Pro	Ala	Gln	Thr	Leu	Glu	Asn	Ser	Glu	Pro	Ala	Pro
225					230					235					240
Val	Ser	Gln	Leu	Gln	Ser	Arg	Leu	Glu	Pro	Lys	Pro	Gln	Pro	Pro	Val
				245					250					255	
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			260					265					270		
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Ala	Pro	Ala	Ser	Arg	Asn	Glu	Lys	Ala	Pro	Val	Asp	Phe	Gly	Tyr	Val
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Gly	Ile	Asp	Ser	Ile	Leu	Glu	Gln	Met	Arg	Arg	Lys	Ala	Met	Lys	Gln
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Gly	Phe	Glu	Phe	Asn	Ile	Met	Val	Val	Gly	Gln	Ser	Gly	Leu	Gly	Lys
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Ser	Thr	Leu	Ile	Asn	Thr	Leu	Phe	Lys	Ser	Lys	Ile	Ser	Arg	Lys	Ser
			340					345					350		
Val	Gln	Pro	Thr	Ser	Glu	Glu	Arg	Ile	Pro	Lys	Thr	Ile	Glu	Ile	Lys
		355					360					365			
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Val Ile Asp Thr Pro Gly Phe Gly Asp His Ile Asn Asn Glu Asn Cys				
385		390		395
Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu				
	405		410	415
Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg				
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Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg				
	435		440	445
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile				
	450		455	460
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val				
465		470		475
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp				
	485		490	495
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val				
	500		505	510
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp				
	515		520	525
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys				
	530		535	540
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr				
545		550		555
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile				
	565		570	575
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu				
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<210> 2833

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2833

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<210> 2834

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<400> 2834

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Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu
      35           40           45
Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser
      50           55           60
Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
65           70           75           80
Lys Cys Leu Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu
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Leu Gly Met Cys Ala
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780

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<210> 2836
 <211> 178
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Thr Leu Ser Val Arg Gly Glu Asp Ile Gly Glu Asp Leu Phe Ser Glu
 50 55 60
 Ala Leu Gly Arg Ala Val Gly Gln Trp Ala Gly Ala Lys Leu Leu Asp
 65 70 75 80
 His Gly Cys Val Glu Ser Ser Ile Leu Asp Ser Ser Ala Gly Ser Ala
 85 90 95
 Pro His Tyr Glu Val Phe Val Ala Leu Arg Gly Leu Arg Asn Leu Ser
 100 105 110
 Glu Glu Asn Arg Asp Lys Leu Asp His Cys Leu Gln Glu Ala Ser Pro
 115 120 125
 Arg Tyr Lys Ser Leu Arg Phe Trp Gly Ser Val Gly Pro Ala Glu Ser
 130 135 140
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 <212> DNA
 <213> Homo sapiens

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<210> 2838

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

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Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
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Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
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Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65				70				75						80	
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
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Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100					105					110		
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

	115		120		125										
Ile	Lys	Asp	Gln	Leu	Gln	Lys	Tyr	Ile	Arg	Glu	Leu	Glu	Gln	Ala	Asn
	130					135					140				
Asp	Ala	Leu	Glu	Arg	Ala	Lys	Arg	Ala	Thr	Ile	Met	Ser	Leu	Glu	Asp
145					150					155					160
Phe	Glu	Gln	Arg	Leu	Asn	Gln	Ala	Ile	Glu	Arg	Asn	Ala	Phe	Leu	Glu
				165					170					175	
Ser	Glu	Leu	Asp	Glu	Lys	Glu	Asn	Leu	Leu	Glu	Ser	Val	Gln	Arg	Leu
			180					185					190		
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	195						200					205			
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	210					215					220				
Thr	Asp	Thr	Ala	Val	Gln	Ala	Thr	Gly	Ser	Val	Pro	Ser	Thr	Pro	Ile
225					230					235					240
Ala	His	Arg	Gly	Pro	Ser	Ser	Ser	Leu	Asn	Thr	Pro	Gly	Ser	Phe	Arg
				245					250					255	
Arg	Gly	Leu	Asp	Asp	Xaa	His	Arg	Gly	Thr	Pro	Leu	Thr	Pro	Ala	Ala
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Arg	Ile	Ser	Ala	Leu	Asn	Ile	Val	Gly	Asp	Leu	Leu	Arg	Lys	Val	Gly
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Ser	Pro	Asn	Arg	Thr	Gly	Gly	Pro	Ala	Ser	Gly	Arg	Ser	Ser	Lys	Asn
305					310					315					320
Arg	Asp	Gly	Gly	Glu	Arg	Arg	Pro	Ser	Ser	Thr	Ser	Val	Pro	Leu	Gly
				325					330					335	
Asp	Lys	Gly	Ser	Val	Pro	Ser	Asn	Lys	Pro	Leu	Ala	Gly	Gly	Glu	Asn
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<210> 2839

<211> 606

<212> DNA

<213> Homo sapiens

<400> 2839

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420

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<210> 2840
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 Ala Thr Asn Gly Asp Pro Arg Asn Ser Cys Ser Leu His Tyr Ile His
 35 40 45
 Pro Tyr Gln Pro Asn Glu Tyr Leu Lys Ala Leu Val Ala Val Gly Glu
 50 55 60
 Ile Cys Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala Phe Gly Phe
 65 70 75 80
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 Glu Ala Tyr Gln Ser Cys Leu Pro Lys Leu Gln Leu Tyr Gly Pro Thr
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 Thr Asn Thr Lys Glu Ala Ser Gln Tyr Phe Ile Leu Leu Ile Leu Thr
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 Asp Gly Val Ile Thr Asp Met Gly Asp Thr Arg Glu Ala Ile Val His
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 <213> Homo sapiens

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<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln
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Cys	Lys	Ser	Glu	Pro	Pro	Leu	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr
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Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys
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Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr
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Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val
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Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His
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Gln	Val	Leu	Thr	Glu	Gln	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe
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Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr
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Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp
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Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala
			180					185					190		
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu
		195					200					205			
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225					230					235					240
Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe
			245					250					255		
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro
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Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys				
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Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu				
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Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu				
	340		345	350
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val				
	355		360	365
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys				
	370		375	380
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro				
385		390		395
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile				
	405		410	415
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu				
	420		425	430
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val				
	435		440	445
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His				
	450		455	460
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu				
465		470		475
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile				
	485		490	495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro				
	500		505	510
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<210> 2843

<211> 497

<212> DNA

<213> Homo sapiens

<400> 2843

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<210> 2844
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<213> Homo sapiens

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35 40 45
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu
50 55 60
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe
65 70 75 80
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro
85 90 95
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu
100 105 110
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly
115 120 125
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile
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Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala
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Gln Ala Ser Thr Pro
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<210> 2845
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<212> DNA
<213> Homo sapiens

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<210> 2846

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2846

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Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
			20					25					30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40					45			
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
	50					55					60				
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75					80
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
			85					90						95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105						110	
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120					125			
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
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<210> 2847

<211> 2830

<212> DNA

<213> Homo sapiens

<400> 2847

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<210> 2848

<211> 856

<212> PRT

<213> Homo sapiens

<400> 2848

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			20					25					30		
Thr	Ser	Ala	Pro	Leu	Ile	Arg	Arg	Gln	Leu	Ser	His	Asp	His	Glu	Ser
		35				40					45				
Val	Gly	Pro	Pro	Ser	Leu	Asp	Ala	Gln	Pro	Asn	Ser	Lys	Thr	Glu	Arg
	50				55					60					
Ser	Lys	Ser	Tyr	Asp	Glu	Gly	Leu	Asp	Asp	Tyr	Arg	Glu	Asp	Ala	Lys

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Leu	Ser	Phe	Lys	His	Val	Ser	Ser	Leu	Lys	Gly	Ile	Lys	Ile	Ala	Asp
				85					90					95	
Ser	Gln	Lys	Ser	Ser	Glu	Asp	Ser	Gly	Ser	Arg	Lys	Asp	Ser	Ser	Ser
			100					105					110		
Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
		115					120					125			
Leu	Val	Thr	Asp	Lys	Gly	Lys	Arg	Val	Gly	Gly	Ser	Ile	Arg	Pro	Trp
	130					135					140				
Lys	Gln	Met	Tyr	Val	Val	Leu	Arg	Gly	His	Ser	Leu	Tyr	Leu	Tyr	Lys
145					150					155					160
Asp	Lys	Arg	Glu	Gln	Thr	Thr	Pro	Ser	Glu	Glu	Gln	Pro	Ile	Ser	
				165				170					175		
Val	Asn	Ala	Cys	Leu	Ile	Asp	Ile	Ser	Tyr	Ser	Glu	Thr	Lys	Arg	Lys
		180						185					190		
Asn	Val	Phe	Arg	Leu	Thr	Thr	Ser	Asp	Cys	Glu	Cys	Leu	Phe	Gln	Ala
	195						200					205			
Glu	Asp	Arg	Asp	Asp	Met	Leu	Ala	Trp	Ile	Lys	Thr	Ile	Gln	Glu	Ser
	210					215					220				
Ser	Asn	Leu	Asn	Glu	Glu	Asp	Thr	Gly	Val	Thr	Asn	Arg	Asp	Leu	Ile
225					230					235					240
Ser	Arg	Arg	Ile	Lys	Glu	Tyr	Asn	Asn	Leu	Met	Ser	Lys	Ala	Glu	Gln
				245				250						255	
Leu	Pro	Lys	Thr	Pro	Arg	Gln	Ser	Leu	Ser	Ile	Arg	Gln	Thr	Leu	Leu
		260						265					270		
Gly	Ala	Lys	Ser	Glu	Pro	Lys	Thr	Gln	Ser	Pro	His	Ser	Pro	Lys	Glu
		275					280				285				
Glu	Ser	Glu	Arg	Lys	Leu	Leu	Ser	Lys	Asp	Asp	Thr	Ser	Pro	Pro	Lys
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Asp	Lys	Gly	Thr	Trp	Arg	Lys	Gly	Ile	Pro	Ser	Ile	Met	Arg	Lys	Thr
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Phe	Glu	Lys	Lys	Pro	Thr	Ala	Thr	Gly	Thr	Phe	Gly	Val	Arg	Leu	Asp
				325				330						335	
Asp	Cys	Pro	Pro	Ala	His	Thr	Asn	Arg	Tyr	Ile	Pro	Leu	Ile	Val	Asp
		340						345					350		
Ile	Cys	Cys	Lys	Leu	Val	Glu	Glu	Arg	Gly	Leu	Glu	Tyr	Thr	Gly	Ile
	355						360					365			
Tyr	Arg	Val	Pro	Gly	Asn	Asn	Ala	Ala	Ile	Ser	Ser	Met	Gln	Glu	Glu
	370					375					380				
Leu	Asn	Lys	Gly	Met	Ala	Asp	Ile	Asp	Ile	Gln	Asp	Asp	Lys	Trp	Arg
385					390					395					400
Asp	Leu	Asn	Val	Ile	Ser	Ser	Leu	Leu	Lys	Ser	Phe	Phe	Arg	Lys	Leu
			405						410					415	
Pro	Glu	Pro	Leu	Phe	Thr	Asn	Asp	Lys	Tyr	Ala	Asp	Phe	Ile	Glu	Ala
			420					425					430		
Asn	Arg	Lys	Glu	Asp	Pro	Leu	Asp	Arg	Leu	Lys	Thr	Leu	Lys	Arg	Leu
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	450					455					460				
Ala	His	Leu	Lys	Thr	Val	Ala	Glu	Asn	Ser	Glu	Lys	Asn	Lys	Met	Glu
465					470					475					480
Pro	Arg	Asn	Leu	Ala	Ile	Val	Phe	Gly	Pro	Thr	Leu	Val	Arg	Thr	Ser
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<211> 380

<212> DNA

<213> Homo sapiens

<400> 2849

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<210> 2850

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2850

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Ala	Lys	Pro	Glu	Pro	Ala	Pro	Ala	Pro	Pro	Pro	Pro	Gly	Ala	Lys	Pro
		20						25					30		
Glu	Glu	Asp	Lys	Lys	Asp	Gly	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys
		35					40					45			
Ala	Val	Gln	Asp	His	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys	Ala	Val
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<211> 2459

<212> DNA

<213> Homo sapiens

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<211> 317

<212> PRT

<213> Homo sapiens

<400> 2852

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			20					25					30		
Leu	Tyr	Met	Leu	Val	Lys	Met	Ser	His	His	Val	Trp	Thr	Ala	Gln	Asn
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Val	Asp	Pro	Ala	Ser	Phe	Leu	Ser	Thr	Thr	Leu	Gly	Asn	Val	Leu	Val
	50					55					60				
Thr	Val	Lys	Arg	Asn	Phe	Asp	Lys	Cys	Ile	Ser	Asn	Gln	Ile	Arg	Gln
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Phe	Val	Ala	Glu	Phe	Glu	Glu	Phe	Ala	Gly	Leu	Ala	Glu	Ser	Ile	Phe
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Lys	Asn	Ala	Glu	Arg	Arg	Gly	Asp	Leu	Asp	Lys	Ala	Tyr	Thr	Lys	Leu
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Gly	Lys	Glu	Val	Lys	Lys	Gly	Leu	Asp	Asn	Leu	Tyr	Lys	Lys	Val	Asp
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Lys	His	Leu	Cys	Glu	Glu	Glu	Asn	Leu	Leu	Gln	Val	Val	Trp	His	Ser
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Met	Gln	Asp	Glu	Phe	Ile	Arg	Gln	Tyr	Lys	His	Phe	Glu	Gly	Leu	Ile
		275					280					285			
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<212> DNA

<213> Homo sapiens

<400> 2853

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<211> 1235

<212> PRT

<213> Homo sapiens

<400> 2854

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Gln	Lys	Leu	Arg	His	Pro	Asn	Thr	Ile	Gln	Tyr	Arg	Gly	Cys	Tyr	Leu
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Glu	His	Glu	Gln	Asp	Ser	Ala	Leu	Arg	Glu	Gln	Leu	Ser	Gly	Tyr	Lys		
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Arg	Met	Arg	Arg	Gln	His	Gln	Lys	Gln	Leu	Leu	Ala	Leu	Glu	Ser	Arg		
			500					505					510				
Leu	Arg	Gly	Glu	Arg	Glu	Glu	His	Ser	Ala	Arg	Leu	Gln	Arg	Glu	Leu		
	515						520					525					
Glu	Ala	Gln	Arg	Ala	Gly	Phe	Gly	Ala	Glu	Ala	Glu	Lys	Leu	Ala	Arg		
	530				535						540						
Arg	His	Gln	Ala	Ile	Gly	Glu	Lys	Glu	Ala	Arg	Ala	Ala	Gln	Ala	Glu		
545					550					555					560		
Glu	Arg	Lys	Phe	Gln	Gln	His	Ile	Leu	Gly	Gln	Gln	Lys	Lys	Glu	Leu		
				565					570					575			
Ala	Ala	Leu	Leu	Glu	Ala	Gln	Lys	Arg	Thr	Tyr	Lys	Leu	Arg	Lys	Glu		
			580					585					590				
Gln	Leu	Lys	Glu	Glu	Leu	Gln	Glu	Asn	Pro	Ser	Thr	Pro	Lys	Arg	Glu		
	595						600					605					
Lys	Ala	Glu	Trp	Leu	Leu	Arg	Gln	Lys	Glu	Gln	Leu	Gln	Gln	Cys	Gln		
	610					615					620						
Ala	Glu	Glu	Glu	Ala	Gly	Leu	Leu	Arg	Arg	Gln	Arg	Gln	Tyr	Phe	Glu		
625					630					635					640		
Leu	Gln	Cys	Arg	Gln	Tyr	Lys	Arg	Lys	Met	Leu	Leu	Ala	Arg	His	Ser		
				645					650					655			
Leu	Asp	Gln	Asp	Leu	Leu	Arg	Glu	Asp	Leu	Asn	Lys	Lys	Gln	Thr	Gln		
			660					665					670				
Lys	Asp	Leu	Glu	Cys	Ala	Leu	Leu	Leu	Arg	Gln	His	Glu	Ala	Thr	Arg		

2092

1105 1110 1115 1120
 Asp Gly Phe Arg Ser Arg Leu Pro Val Pro Gly Pro Arg Arg Arg Asn
 1125 1130 1135
 Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg Val Trp Val
 1140 1145 1150
 Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser Gln Gly Leu
 1155 1160 1165
 Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly
 1170 1175 1180
 Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg
 1185 1190 1195 1200
 Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly
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 Thr Leu Ala Gly Arg Arg Ser Arg Thr Arg Gln Ser Arg Ala Leu Pro
 1220 1225 1230
 Pro Trp Arg
 1235

<210> 2855
 <211> 1676
 <212> DNA
 <213> Homo sapiens

<400> 2855
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 120
 gaggaagcca tctttgacac cctttgcacc gatgacagct ctgaagaggc aaagacactc
 180
 acaatggaca tattgacatt ggctcacacc tccacagaag ctaagggcct gtcctcagag
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 300
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 360
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 420
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 480
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 660
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 720
 atagaaagag aagtgcagc acccagggcc acgaccctca gtggagctct ggtcacagtt
 780
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 840
 gtctcaggag cagctccggt ctccatagag gctgggtcag cagtgggcaa aacaacttcc
 900

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 960
 ccttcagaga caccgaccat ggacatcgca accaaggggc ccttccccac cagcagggac
 1020
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 1080
 gccaaagatca caacctcagc gaagaccacg atgaagcccc caacagccac gcccacgact
 1140
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 1200
 ggctgagtgt ggcttccccg gaagacctca ctgaccccag agtggcagaa aggctgatgc
 1260
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 1320
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 1380
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 1440
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 1560
 gtgtccttgg actcaccttg gcacatgttc tgtgtttcag taaagagaga cctgatcacc
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 1676

<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856

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			20					25					30		
Gln	Thr	Ile	Thr	Gly	Ser	Asp	Pro	Glu	Glu	Ala	Ile	Phe	Asp	Thr	Leu
		35				40						45			
Cys	Thr	Asp	Asp	Ser	Ser	Glu	Glu	Ala	Lys	Thr	Leu	Thr	Met	Asp	Ile
	50					55					60				
Leu	Thr	Leu	Ala	His	Thr	Ser	Thr	Glu	Ala	Lys	Gly	Leu	Ser	Ser	Glu
65					70					75				80	
Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr	Pro	Ser	Arg
				85					90					95	
Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr
			100					105					110		
Pro	Ser	Arg	Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro
		115						120				125			
Val	Ile	Thr	Pro	Ser	Trp	Ser	Pro	Gly	Ser	Asp	Val	Thr	Leu	Leu	Ala
	130					135					140				
Glu	Ala	Leu	Val	Thr	Val	Thr	Asn	Ile	Glu	Val	Ile	Asn	Cys	Ser	Ile
145					150					155				160	
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<210> 2857
<211> 1668
<212> DNA
<213> Homo sapiens
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120
aggetagcca gagggtaatt acacaggtgt aggccggcgg ggcgggcgga gggctcggga
180
ggcgcagggg actggaagag ttggctgcgc ccaggcacca ggtggaagaa tttccatacc
240
agccctgcgg aggtgcctct gtttccagag gcgtttttgt acgaagggca ttttgaaagc
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360
agcactctgg gcgaaaattg gatgtgaaaa tgaagccaga ccgagatact ctggatgaat
420
at tt t t t t g a a t a t g a t g c a g a g a g a t t c t t t g t c t c t t t g g c c t t g c t g a t a a c a g a a g g a c
480
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 600
 ccagacgaac taggtctgag gtcacattgt tgtggaagaa taaccttcca atcatggtgg
 660
 aaatgatgct actaccagac tgctgctaca gcgatgatgg gcccaccaca gaggggaattg
 720
 atctaaatga tcttgcgatt aagcaagatg cattattatt agaaagatgg atcttggagc
 780
 cagttcctcg acagaatggg gaccgattta ttgaagagaa gacgcttctg ttggctgtcc
 840
 gctcatttgt gtttttttct cagttaagtg catggctgag tgtttctcat ggtgctattc
 900
 caggaatat tctctacaga atcagtgtg ctgatgtaga cctacagtgg aatttttcac
 960
 agactccaat tgagcatgtg tttcctgttc ccaatgtttc tcacaatgtt gccttgaaag
 1020
 tcagtggta atccctggcc caaacaatct aattatccag ttttgacgtg cagtattcac
 1080
 actaatattg gcctttatga gaaaagaatt caacaacata aacttaaaac tcatcagcac
 1140
 cataacccaa atgaagcaga acaatgtggg acaaacagtt cacagcgtct gtgtagcaaa
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 1260
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 1320
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 1380
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 1440
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 1560
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<210> 2858

<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

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Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25					30		
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35					40					45			
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

50		55		60
Leu Ala Gln Cys Arg	Gln Ala Arg Arg Thr Arg	Ser Glu Val Thr Leu		
65	70	75	80	
Leu Trp Lys Asn Asn	Leu Pro Ile Met Val Glu Met Met	Leu Leu Pro		
	85	90	95	
Asp Cys Cys Tyr Ser	Asp Asp Gly Pro Thr Thr	Glu Gly Ile Asp Leu		
	100	105	110	
Asn Asp Pro Ala Ile	Lys Gln Asp Ala Leu Leu Leu	Glu Arg Trp Ile		
	115	120	125	
Leu Glu Pro Val Pro	Arg Gln Asn Gly Asp Arg Phe	Ile Glu Glu Lys		
	130	135	140	
Thr Leu Leu Leu Ala	Val Arg Ser Phe Val Phe Phe	Ser Gln Leu Ser		
145	150	155	160	
Ala Trp Leu Ser Val	Ser His Gly Ala Ile Pro Arg	Asn Ile Leu Tyr		
	165	170	175	
Arg Ile Ser Ala Ala	Asp Val Asp Leu Gln Trp Asn	Phe Ser Gln Thr		
	180	185	190	
Pro Ile Glu His Val	Phe Pro Val Pro Asn Val Ser	His Asn Val Ala		
	195	200	205	
Leu Lys Val Ser Gly	Gln Ser Leu Ala Gln Thr Ile			
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<210> 2859

<211> 1029

<212> DNA

<213> Homo sapiens

<400> 2859

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180
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240
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420
agtatcagct ctaacaacag tatagcagag gacactgaga gctatgatga tctggatgaa
480
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540
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600
gagacacctg gggcagcttc tcccaaccag cccaccttc ctacgcctca ttgcctcac
660
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720
catcagattc atcatgggca ccacctcaa catggtcacc accatccatc tcatgttgct
780

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 acaactggaa gctctgacag tatcacacca gttgcaccaa cttctgctgt atcatccagt
 900
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 1020
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 1029

<210> 2860

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

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Thr	Met	His	Gln	Pro	Pro	Glu	Ser	Thr	Ala	Ala	Ala	Ala	Ala	Ala	Ala
			20					25					30		
Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg
		35				40						45			
Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly
	50				55					60					
Val	Gly	Ser	Asn	Ala	Thr	Ser	Ser	Glu	Asp	Phe	Pro	Pro	Pro	Ser	Leu
65					70					75					80
Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro
				85					90					95	
Pro	Pro	Pro	Gln	Ser	Leu	Asn	Leu	Leu	Ser	Gln	Ala	Gln	Leu	Gln	Ala
			100					105					110		
Gln	Pro	Leu	Ala	Pro	Gly	Gly	Thr	Gln	Met	Lys	Lys	Lys	Ser	Gly	Phe
		115					120					125			
Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser
	130					135					140				
Asn	Asn	Ser	Ile	Ala	Glu	Asp	Thr	Glu	Ser	Tyr	Asp	Asp	Leu	Asp	Glu
145					150					155					160
Ser	His	Thr	Glu	Asp	Leu	Ser	Ser	Ser	Glu	Ile	Leu	Asp	Val	Ser	Leu
				165					170					175	
Ser	Arg	Ala	Thr	Asp	Leu	Gly	Glu	Pro	Glu	Arg	Ser	Ser	Ser	Glu	Glu
			180					185					190		
Thr	Leu	Asn	Asn	Phe	Gln	Glu	Ala	Glu	Thr	Pro	Gly	Ala	Val	Ser	Pro
		195					200					205			
Asn	Gln	Pro	His	Leu	Pro	Gln	Pro	His	Leu	Pro	His	Leu	Pro	Gln	Gln
	210					215					220				
Asn	Val	Val	Ile	Asn	Gly	Asn	Ala	His	Pro	His	His	Leu	His	His	His
225					230					235					240
His	Gln	Ile	His	His	Gly	His	His	Leu	Gln	His	Gly	His	His	His	Pro
				245					250					255	
Ser	His	Val	Ala	Val	Ala	Ser	Ala	Ser	Ile	Thr	Gly	Gly	Pro	Pro	Ser
			260					265					270		
Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile
		275					280					285			
Thr	Pro	Val	Ala	Pro	Thr	Ser	Ala	Val	Ser	Ser	Ser	Gly	Ser	Pro	Ala